

Tracked Changes and Notes on Main Text of the Permit

Draft

Phase I Municipal Stormwater NPDES and State Waste
Discharge General Permit

February 15, 2006

Tracked Changes and Notes on Main Text of the Permit

Permit No. _____

Coverage Date _____

Issuance Date:

Effective Date:

Expiration Date:

National Pollutant Discharge Elimination System and
State Waste Discharge General Permit for Discharges
from Large and Medium Municipal Separate Storm Sewer Systems

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
OLYMPIA, WASHINGTON 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this permit are authorized to discharge to waters of the state in accordance with the special and general conditions which follow.

Dave C. Peeler
Water Quality Program Manager
Department of Ecology

Tracked Changes and Notes on Main Text of the Permit

TABLE OF CONTENTS

S1.	PERMIT COVERAGE AND PERMITTEES	5
S2.	AUTHORIZED DISCHARGES	7
S3.	RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY PERMITTEES	8
S4.	COMPLIANCE WITH STANDARDS	9
S5.	STORMWATER MANAGEMENT PROGRAM	10
S6.	STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES	40
S7.	TOTAL MAXIMUM DAILY LOAD ALLOCATIONS <u>IMPLEMENTATION</u>	56
S8.	MONITORING	57
S9.	REPORTING REQUIREMENTS	68
G1.	DISCHARGE VIOLATIONS	70
G2.	PROPER OPERATION AND MAINTENANCE	70
G3.	NOTIFICATION OF SPILL	70
G4.	BYPASS PROHIBITED	70
G5.	RIGHT OF ENTRY	71
G6.	DUTY TO MITIGATE	71
G7.	PROPERTY RIGHTS	71
G8.	COMPLIANCE WITH OTHER LAWS AND STATUTES	71
G9.	MONITORING	71
G10.	REMOVED SUBSTANCES	73
G11.	SEVERABILITY	73
G12.	REVOCATION OF COVERAGE	73

Tracked Changes and Notes on Main Text of the Permit

G13.	TRANSFER OF COVERAGE	74
G14.	GENERAL PERMIT MODIFICATION AND REVOCATION	74
G15.	REPORTING A CAUSE FOR MODIFICATION OR REVOCATION	74
G16.	APPEALS	75
G17.	PENALTIES	75
G18.	DUTY TO REAPPLY	75
G19.	CERTIFICATION AND SIGNATURE	75
G20.	RECORDS RETENTION.....	76
G21.	NON-COMPLIANCE NOTIFICATION <u>UPSET</u>	76
	DEFINITIONS AND ACRONYMS ¹	78
	APPENDIX 1. Minimum Technical Requirements for New Development and Redevelopment	
	APPENDIX 2. TMDL Requirements	
	APPENDIX 3. Annual Report Form for Permittees	
	APPENDIX 4. Annual Report Form for Secondary Permittees and Co-permittees	
	APPENDIX 5. Notice of Intent	
	APPENDIX 6. Street Waste Disposal	
	APPENDIX 7. Determining Construction Site Sediment Damage Potential	
	APPENDIX 8. Urban Land Uses and Pollutant Generating Sources	

¹ Terms that are included in the definitions and acronyms section are indicated in italics the first time they are used in the text of the permit.

Tracked Changes and Notes on Main Text of the Permit

SPECIAL CONDITIONS

S1. PERMIT COVERAGE AND PERMITTEES

A. Permit Coverage Area

This permit covers *discharges* from Large and Medium Municipal Separate Storm Sewer Systems (MS4s) as established at Title 40 CFR 122.26, except for municipal separate storm sewers (MS3s) owned or operated by the Washington State Department of Transportation. Large and medium MS4s include all MS3s located within cities or counties required to have permit coverage.

- B. The following entities had coverage under ~~a~~the previous municipal *stormwater* permit and Ecology has approved their timely reapplications for coverage under this permit~~reapplied for coverage~~. ~~Their~~The coverage date under the previous permit ends and coverage under this permit begins on the effective date of this permit. These entities are covered under this permit as Permittees:

- The City of Seattle
- The City of Tacoma
- King County
- Snohomish County
- Pierce County
- Clark County

- C. King County had coverage under a previous municipal stormwater permit, as a *Co-Permittee* with the City of Seattle, and Ecology has approved its timely reapplication for coverage under this permit~~reapplied for coverage~~. ~~Their~~King County's coverage date under the previous permit ends and coverage under this permit begins on the effective date of this permit. King County is covered as a Co-Permittee with the City of Seattle for discharges ~~it owns or operates for which it is responsible in~~under the existing agreement with the City of Seattle.

[NOTE TO ECOLOGY: The recommended change above regarding King County coverage as Co-Permittee is important to Seattle because it most clearly links the City's and the County's responsibilities under this permit with the existing agreement between the City and the County rather than the more complicated linkage the original text makes between permit compliance and owner/operator status. Attachment 4 more fully discusses Seattle's understanding of King County's responsibilities as a Co-Permittee under the existing agreement.]

- D. Upon application and coverage in accordance with Special Condition S1.F, the following entities are covered under this permit as *Secondary Permittees*:

Tracked Changes and Notes on Main Text of the Permit

1. Port of Seattle, excluding Seattle-Tacoma International Airport
2. Port of Tacoma
3. Drainage, diking, flood control, or diking and drainage districts located in the Cities or unincorporated portions of the Counties listed in S1.B., above, which own or operate municipal separate storm sewers serving non-agricultural land uses.
4. Other owners or operators of municipal separate storm sewers located in the Cities or unincorporated portions of the Counties listed in S1.B., above. Phase I cities and counties identified in S1.B are not required to have any coverage as secondary permittees; their Phase I coverage suffices for all MS3s they own or operate located in the Cities or unincorporated portions of the Counties listed in S1.B.

[NOTE TO ECOLOGY: The new definition of “secondary permittee” at p. 56, lines 31-32, confirms that Phase I cities and counties are never secondary permittees under this permit, even for a Phase I city’s or county’s MS3 that is located in the jurisdiction of another Phase I city or county. Seattle agrees and suggests that the permit should state explicitly that the Phase I permit coverage should suffice for all such MS3s without further application or different programming. This issue needs coordination in S6 as well. See additional comments on this subject in other Attachments. Seattle also believes Phase I coverage should suffice for any of the Permittees’ regulated facilities located in Phase II areas; permit language might need additional amendment for that purpose in both the Phase I and Phase II permits.]

E. Unless otherwise noted, the term “Permittee” shall include Permittee, Co-Permittee, and Secondary Permittee, as defined above in Special Conditions S1.B., S1.C. and S1.D.

F. Coverage for Secondary Permittees

1. To obtain coverage under this permit, each secondary Permittee identified under Special Condition S1.D shall either:
 - a. Submit a *Notice of Intent* (NOI) and provide public notice of the application for coverage in accordance with WAC 173-226-130. The NOI shall constitute the application for coverage. Ecology will notify applicants in writing of their status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and ~~demonstration that after~~ the public notice requirements have been met. Ecology will provide notice in writing to affected Permittees and Co-Permittees of all new Secondary Permittees granted coverage under this permit.
 - OR
 - b. Submit a co-application jointly with a permittee named in S1.B. and provide public notice of the application for coverage in accordance with WAC 173-226-130. The co-application shall consist of an amendment to the Phase I Part 1 and Part 2 permit applications. Ecology will notify applicants in writing of their

Tracked Changes and Notes on Main Text of the Permit

status concerning coverage under this permit within 90 days of Ecology's receipt of the NOI and ~~demonstration that~~ after the public notice requirements have been met. Ecology will provide notice in writing to affected Permittees and Co-Permittees of all new Secondary Permittees granted coverage under this permit.

[NOTE TO ECOLOGY: As the single regulatory authority for NPDES permits, Ecology is the only entity capable of providing information to other Permittees when a new Permittee's application has been approved and the permit issued. This information is required for other Permittees to comply with the permit. Special Condition S5.C.3 (Coordination), for example, requires intergovernmental agreements among Permittees with shared water bodies or physically interconnected MS3s.]

2. NOIs and co-applications shall be submitted to:

Department of Ecology
Water Quality Program
Municipal Stormwater Permit Program
P.O. Box 47696
Olympia, WA 98504-7696

S2. AUTHORIZED DISCHARGES

[NOTE TO ECOLOGY: Seattle's comments on S2 are found in a separate Seattle Attachment.]

A. This permit authorizes the discharge of stormwater to surface waters and to ground waters of the state from municipal separate storm sewers owned or operated by each Permittee covered under this permit in the geographic area covered by this permit pursuant to S1.A, subject to the following limitations:

1. All discharges into and from municipal separate storm sewers owned or operated by Permittees must be in compliance with this permit.
2. Discharges from municipal separate storm sewers constructed after the effective date of this permit must receive all applicable state and local permits and use authorizations, including compliance with Ch. 43.21C RCW (the State Environmental Policy Act).
3. Discharges to ground waters of the state through facilities regulated under the Underground Injection Control (UIC) program, Chapter 173-218 WAC, are not covered under this permit.
4. Discharges to ground waters not subject to regulation under the federal *Clean Water Act* are covered in this permit only under state authorities, Chapter 90.48 RCW, the Water Pollution Control Act

Tracked Changes and Notes on Main Text of the Permit

- 1 B. This permit authorizes discharges of *stormwater associated with industrial and*
2 *construction activity* and *process wastewater* discharges from municipal separate storm
3 sewers owned or operated by the Permittee to waters of the state only under the
4 following conditions:
- 5 1. Stormwater associated with construction or industrial activity, as defined by
6 40CFR122.26, must be authorized by a separate individual or general *National*
7 *Pollutant Discharge Elimination* (NPDES) permit; or
- 8 2. Process wastewater must be authorized by another NPDES permit.
- 9 C. This permit authorizes discharges from emergency fire fighting activities unless the
10 discharges from fire fighting activities are identified as significant sources of pollutants
11 to waters of the State.
- 12 D. This permit does not authorize any other illicit or non-stormwater discharges except as
13 provided in Special Condition S5.C.8 or S6., nor does it relieve entities responsible for
14 illicit discharges, including spills of oil or hazardous substances, from responsibilities
15 and liabilities under state and federal laws and regulations pertaining to those
16 discharges.

17 S3. RESPONSIBILITIES OF PERMITTEES, CO-PERMITTEES, AND SECONDARY 18 PERMITTEES

- 19 A. Each Permittee, Co-Permittee and Secondary Permittee is responsible for ~~compliance~~
20 complying with the terms of this permit for the municipal separate storm sewers it owns
21 or operates that discharge to the MS4.

22 **[NOTE TO ECOLOGY: This clarifies that the permit does not cover MS3s discharging to**
23 **the combined sewer, per 40 CFR § 122.26(a)(7).]**

- 24 1. Each Permittee, as listed in S1.B., is required to comply with all conditions of this
25 permit, except for S6., *Stormwater management program* for Co-Permittees and
26 Secondary Permittees.
- 27 2. Each Co-Permittee and Secondary Permittee, as defined in S1.C. and S1.D., is
28 required to comply with all conditions of this permit, except for Special Condition
29 S5., *Stormwater management program* for Permittees. This provision includes
30 Secondary Permittees that co-apply under Special Condition S1.F.1.b.
- 31 B. Permittees may rely on another *entity* to meet one or more of the requirements of this
32 permit, if the other entity, in fact, implements the ~~control measure requirement~~, and
33 agrees to implement the ~~control measure requirement~~ on the Permittee's behalf.
34 Permittees that are relying on another entity to satisfy one or more of their permit
35 ~~obligations requirements~~ remain responsible for permit compliance if the other entity
36 fails to ~~implement satisfy~~ the permit ~~conditions~~ requirement(s). Where permit
37 responsibilities are shared they must be documented as follows:

Tracked Changes and Notes on Main Text of the Permit

[NOTE TO ECOLOGY: The word “requirement” is much clearer than the term “control measure” when used in the context of another entity meeting a permit condition on behalf of another entity. Such permit conditions that can be met by another entity can include, for example, monitoring, public education, and training. Seattle considers these activities to be stormwater management practices rather than control measures. Note that in S4 (page 5, line 10) “control measures” is listed by Ecology rather than “management practices.”]

1. Permittees and Co-Permittees that are continuing coverage under this permit must submit a statement that describes ~~the~~ how permit requirements ~~that~~ will be implemented by other entities. The statement must be signed by all participating entities. There is no deadline for submitting such a statement, provided that this does not alter implementation deadlines. Permittees and Co-Permittees may amend their statements during the term of the permit to establish, terminate, or amend shared responsibility arrangements, and submit the amended statements to Ecology.

[NOTE TO ECOLOGY: Seattle believes it very likely that during the permit term a number of agreements regarding shared responsibilities will need amending or possibly terminating. The Draft Permit should include provisions not only for entering into agreements, but also for amending or terminating agreements.]

2. Secondary Permittees must submit an NOI that describes which requirements they will implement and identify the entities that will implement the other permit requirements in the area served by the secondary Permittee’s MS4. A statement confirming the shared responsibilities, signed by all participating entities, must accompany the NOI. Secondary Permittees may amend their NOI, during the term of the permit, to establish, terminate, or amend shared responsibility arrangements, provided this does not alter implementation deadlines.
- C. Unless otherwise noted, all appendices to this permit are incorporated by this reference as if set forth fully within this permit.

S4. COMPLIANCE WITH STANDARDS

[NOTE TO ECOLOGY: Seattle’s comments on S5 are found in a separate Seattle Attachment.]

- A. In accordance with RCW 90.48.520, the discharge of toxicants to waters of the state of Washington which would violate any *water quality standard*, including toxicant standards, sediment criteria, and dilution zone criteria is prohibited.
- B. This permit does not authorize a violation of Washington State surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (chapter 173-204 WAC), or human health-

Tracked Changes and Notes on Main Text of the Permit

based criteria in the national Toxics Rule (Federal Register, Vol. 57, NO. 246, Dec. 22, 1992, pages 60848-60923).

- C. The Permittee shall reduce the discharge of pollutants to the *maximum extent practicable* (MEP).
- D. The Permittee shall use *all known, available, and reasonable methods of prevention, control and treatment (AKART)* to prevent and control pollution of waters of the state of Washington.
- E. In order to meet the goals of the Clean Water Act, to demonstrate compliance with S4.C and S4.D, and make progress towards compliance with applicable surface water, ground water and sediment management standards, each Permittee shall comply with the requirements of this permit.
- F. Ecology may modify or revoke and reissue this *general permit* in accordance with General Condition G14. GENERAL PERMIT MODIFICATION AND REVOCATION, if Ecology becomes aware of additional control measures, management practices or other actions beyond what is required in this permit, that are necessary to:
 - 1. Reduce the discharge of pollutants to the MEP;
 - 2. Comply with the state AKART requirements; or
 - 3. Control the discharge of toxicants to waters of the state of Washington.

S5. STORMWATER MANAGEMENT PROGRAM

- A. Each Permittee shall implement a Stormwater Management Program (SWMP) during the term of this permit. For the purpose of this permit a stormwater management program is a set of actions comprising the *components* listed in S5.B., S5.C.1 through S5.C.10., and additional actions and activities, ~~as described in S7 where necessary, to meet the implement TMDLs requirements of applicable TMDLs.~~ SWMP components and other permit terms do not require permittees to violate or exceed the limits or authorizations set by any local, state, or federal law.

[NOTE TO ECOLOGY: Please see S7 and Definitions section for discussion of TMDLs. The last sentence is essential to clarify that Ecology is not requiring any actions that might violate or exceed legal limits. The sentence could be placed elsewhere, as it is intended to apply to the entire permit. As Ecology is aware, municipalities are creatures of state and local law and are subject to local (such as charters), state, and federal constitutional, statutory and other legal limitations, often imposed to protect the rights of individuals to promote the public good, civic order, and state policies. A well-known example is limits on inspections established in federal and state constitutions and by state courts in McCready and progeny. Surely it is not Ecology's objective to place municipalities in jeopardy between permit compliance and violation of other binding law.]

Tracked Changes and Notes on Main Text of the Permit

In a prescriptive permit such as Ecology proposes, any “additional actions and activities” that are required must be stated in the permit, not left unstated. Presumably, Ecology means the actions stated in S7 to implement TMDLs.]

1. Each Permittee shall prepare written documentation of their SWMP and submit it to Ecology in written and electronic formats with the first year annual report, in accordance with the requirements in S9 Reporting Requirements. The documentation of the SWMP shall be organized according to the program components in S5.C., ~~and shall be updated annually.~~ The SWMP documentation shall include a description of each of the program components included in S5.C, and any additional actions and activities described in S7 ~~necessary to meet the to~~ implement TMDL requirements of applicable TMDLs . Ecology shall review and certify in writing within 60 days that the reports submitted by the Permittee satisfies the requirements of this permit.

[NOTE TO ECOLOGY: (1) The basis for Seattle’s recommendation that Ecology provide written feedback on annual reports within 60 days is provided in S9. (2) The intent of requirement S5.A.1 is unclear regarding updating the SWMP. Seattle understands that Ecology expects to receive, as part of the first year annual report, every Permittee’s fully documented SWMP. Our expectation, given the scale, scope and nature of the program components contained in S5.C, is that this document will be large. Updating the SWMP every year will be a time-consuming task and largely duplicative of the Annual Reporting requirement of S9. Additionally, as there is no requirement to submit this updated SWMP to Ecology, there is no clear target audience for the product.]

2. Each permittee shall track the cost of development and implementation of the SWMP required by this section. This information shall be included in the annual report.

3. Each Permittee shall track the number of inspections, official enforcement actions and types of public education activities as stipulated by the respective program component. This information shall be included in the annual report.

B. ~~The SWMP shall be designed to reduce the discharge of pollutants from MS4s to the maximum extent practicable, meet state AKART requirements, and protect water quality.~~

~~—Development and implementation of stormwater management programs required under this permit constitute the controls necessary to reduce the discharge of pollutants to the maximum extent practicable and meet state AKART requirements.~~

[NOTE TO ECOLOGY: Because the permit is prescriptive and designed by Ecology, Ecology should more clearly affirm that the SWMP is MEP and AKART. Seattle’s recommendation above for Paragraph B is based on the Fact Sheet (Page 27, lines 1-12).]

Permittees are to continue implementation of existing stormwater management programs until they begin implementation of the updated stormwater management program in accordance with the terms of this permit, including implementation

Tracked Changes and Notes on Main Text of the Permit

schedules. The Department of Ecology may facilitate or engage in efforts related to SWMP requirements (e.g., coordination) and modifications to SWMP requirements in order to meet stormwater objectives.

During the coverage period of the permit, if the Permittee can demonstrate an equivalent or improved approach to any of the components listed within the SWMP, Ecology can modify the permit components, including Minimum Performance Measures, upon approval of a request by the permittee. Permittee shall be responsible for providing funding to cover the costs associated with review and approval by Ecology of Permittee's proposed modifications unless Ecology agrees otherwise. Permittee shall update its SWMP as necessary to include any changes caused by modifications made under this section.

[NOTE TO ECOLOGY: Seattle would like to retain some degree of flexibility regarding program implementation and minimum performance standards, particularly should our coverage under this permit extend beyond five years. We propose that the phrase, "coverage period of the permit" rather than "term of the permit" to allow Ecology to modify SWMP-related portions of the permit through to the time the next permit is issued.]

C. The SWMP shall include the components listed below. All components generally discussed in subsections labeled "a" are mandatory and must be implemented by each Permittee by accomplishing the listed mandatory performance measures in subsections labeled "b" within the limits of local, state, and federal law. The requirements of the stormwater management program shall apply to municipal separate storm sewers and areas served by municipal separate storm sewers owned or operated by each Permittee. Co-Permittees and Secondary Permittees are responsible for implementation of Stormwater Management Programs as indicated in Special Condition S6.

[NOTE TO ECOLOGY: Seattle suggests that the permit clarify that the general statements labeled as "a" are implemented by the specific actions labeled as "b."]

1. Legal Authority

- a. No later than the effective date of this permit, each Permittee must be able to demonstrate that ~~they it~~ can operate pursuant to legal authority established by statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, within the limits of state and federal law and municipal authority, which authorizes or enables the Permittee to: control discharges to and from municipal separate storm sewers owned or operated by the Permittee.
- ~~b. This legal authority, which may be a combination of statute, ordinance, permit, contracts, orders, interagency agreements, or similar means, shall authorize or enable the Permittee, at a minimum, to:~~

[NOTE TO ECOLOGY: Suggest returning to 40 CFR 122.26(d)(2)(i)(A)-(F), for the Part II application, which required that applicants "can operate pursuant to legal authority

Tracked Changes and Notes on Main Text of the Permit

established by statute ordinance or series of contracts which authorizes or enables the applicant...” Drafting reflects the measures which could be in place by the permit’s effective date. Permittees have municipal power to maintain the Part II legal authority. Permittees can regulate others through municipal authority but cannot guarantee outcomes.]

- i. Control through ordinance, order or similar means, the contribution of pollutants to municipal separate storm sewers owned or operated by the Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity;
- ii. Prohibit through ordinance, order, or similar means, illicit discharges to the municipal separate storm sewer owned or operated by the Permittee;
- iii. Control through ordinance, order, or similar means, the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewers owned or operated by the Permittee;
- iv. Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the municipal separate storm sewer system to another portion of the municipal separate storm sewer system;
- v. Require compliance with conditions in ordinances, permits, contracts, or orders; and,
- vi. Within the limitations of local, state, and federal law, carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the municipal separate storm sewer and compliance with local ordinances.

2. Municipal Separate Storm Sewer System Mapping and Documentation

- a. The SWMP shall include an ongoing program for mapping and documenting the MS4.
- b. Minimum performance measures. The information and its form of retention shall include:
 - i. No later than 2 years from the effective date of this permit each permittee shall map all known municipal separate storm sewer ~~outfalls and receiving waters~~ owned or operated by the permittee, and structural stormwater BMPs known to and owned, or operated, ~~or maintained~~ by the Permittee.
 - ii. No later than 4 years from the effective date of this permit each permittee shall map the attributes listed below for all storm sewer outfalls known to and owned or operated by the permittee with a 24” inches nominal diameter

Tracked Changes and Notes on Main Text of the Permit

or larger, or an equivalent cross-sectional area for non-pipe systems. For Counties, the mapping shall be done within *urban/higher density rural sub-basins*. For Cities, the mapping shall be done throughout the City.

- (1) Tributary conveyances (indicate type, material, and size where known);
- (2) Associated drainage areas; and
- (3) Land use.

iii. Each Permittee shall initiate a program to develop and maintain a map of all connections to the municipal separate storm sewer authorized or allowed by the permittee after the effective date of this permit.

iv. Each Permittee shall map existing connections over 8" to municipal separate storm sewers tributary to all storm sewer outfalls with a 24" inches nominal diameter or larger, or an equivalent cross-sectional area for non-pipe systems, according to the following schedule:

City of Seattle and City of Tacoma: 2 years after the effective date of this permit

Snohomish, King, Pierce and Clark Counties: one half the area of the County within urban/higher density rural subbasins 4 years after the effective date of this permit.

v. ~~No later than 4 years from the effective date of this permit each permittee shall map geographic areas served by the Permittee's MS4 that do not discharge stormwater to surface water.~~

[NOTE TO ECOLOGY: Per the Draft Fact Sheet (page 29), paragraph v. above requires Permittees to map geographic "areas that drain to ground" but not "systems that discharge to ground." The intent this requirement is uncertain, which makes it difficult to understand how best to meet it. More critically, Ecology's expectation regarding the desired degree of detail in the GIS layer is also unclear. The Fact Sheet specifically includes "potholes" among the required mapped features. Given this example, which represents a particularly small-scale "area," it appears that Permittees are also expected to map such areas as individual lots where rain gardens have been installed or downspouts have been disconnected. Maps would also have to be updated when potholes are repaired. This represents a significant outlay of resources to meet an unclear need. Unless the purpose of this requirement can be better explained and the level of necessary detail better clarified, Seattle recommends the requirement be removed here and in the Fact Sheet.]

vi. ~~To the extent consistent with national security laws and directives, Each~~each Permittee shall make available to Ecology, upon request, available maps depicting the information required in S5.C.2b.i. through v., above. The preferred format of submission will be an electronic format with fully

Tracked Changes and Notes on Main Text of the Permit

described mapping standards. An example description is provided at <http://www.ecy.wa.gov/services/gis/data/standards.htm> where the preferred standards are described. Notification of updated GIS data layers shall be included in annual reports.

vii. Upon request, and to the extent appropriate, Permittees shall provide mapping information to Co-Permittees and Secondary Permittees.

3. Coordination

a. The SWMP shall include coordination mechanisms among entities covered under a municipal stormwater NPDES permit to encourage coordinated stormwater-related policies, programs and projects within a watershed. The SWMP shall also include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this permit.

b. Minimum Performance Measures:

i. No later than 12 months after the effective date of this permit, establish, in writing, ~~and begin implementation of, an~~ intragovernmental (internal) coordination agreement(s) or Executive directives(s) to facilitate compliance with the terms of this permit.

[NOTE TO ECOLOGY: As an option to negotiating among many departments in order to obtain a single coordination agreement, Seattle recommends adding the option above as a means to facilitate coordination among departments within a jurisdiction.]

ii. No later than ~~12~~ 24 months after the effective date of this permit, ~~or within 24 months following the addition of a new Secondary Permittee,~~ establish, in writing, ~~and begin implementation of,~~ intergovernmental coordination procedures on stormwater management, including

- Coordination mechanisms clarifying roles and responsibilities ~~to~~ for the control of pollutants between *physically interconnected* MS3s of the Permittee and any other Permittee covered by a municipal stormwater permit.
- Process for coordinating stormwater management activities, for *shared waterbodies*, among Permittees, to avoid conflicting plans, policies and regulations.

[NOTE TO ECOLOGY: Seattle recommends at least 24 months to meet the requirement above for two reasons: (1) Most written agreements among Permittees will require Council/Executive approval before they can be legally implemented. It can take several months to meet minimum public notification and, possibly, SEPA requirements. (2) Some water bodies are shared by many Permittees, which will add to the time necessary to

Tracked Changes and Notes on Main Text of the Permit

negotiate the terms and reach agreement by all the parties. Consider, for example, Lake Washington and Puget Sound.

~~•Coordination necessary to develop an integrated monitoring program.~~

[NOTE TO ECOLOGY: This requirement is only applicable if integrated monitoring will be conducted. Seattle recommends that the requirement for written agreements among parties intending to engage in integrated monitoring be deleted here and incorporated into S8 (Monitoring).]

4. Public Involvement and Participation

- a. The SWMP shall provide ongoing opportunities for public involvement in the Permittee's stormwater management program and implementation priorities.
- b. Minimum performance measures:
 - i. No later than 6 months after the effective date of this permit, develop and begin implementing a process to create opportunities for the public to participate in an advisory role ~~in the decision-making processes~~ involving the development, implementation and update of the permittee's SWMP. Each Permittee must develop and implement a process for consideration of public comments on their SWMP.
 - ii. Each Permittee must make their SWMP, the SWMP documentation required under S5.A.1. and all submittals required by this permit, including annual reports, available to the public, starting with the first annual report, on the permittee's website or submitted in electronic format to Ecology for posting on Ecology's website.

5. Controlling Runoff from New Development, Redevelopment and Construction Sites

- a. The SWMP shall include a program to prevent and control the impacts of runoff from new development, redevelopment, and construction activities. The program shall apply to private and public development, including roads.
- b. Minimum performance measures:
 - i. The Minimum Requirements, thresholds, and definitions in Appendix 1, or Minimum Requirements, thresholds, and definitions determined by Ecology to be equivalent to Appendix 1~~),~~ for new development, redevelopment, and construction sites must be included in ordinance or other enforceable documents adopted by the local government. Adjustment and variance criteria equivalent to those in Appendix 1 must be included. More stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds

Tracked Changes and Notes on Main Text of the Permit

1 must provide similarly protective ~~equal protection of receiving waters and~~
2 ~~equal~~ levels of pollutant control as compared to Appendix 1.

3 **[NOTE TO ECOLOGY: Because there may be differences in procedural and/or**
4 **substantive requirements between the proposed requirements ii above and Seattle's**
5 **existing ordinance, the criteria for Adjustments (Appendix 1) and Exceptions/Variations**
6 **(Appendix 1) are still being analyzed with respect to equivalency with Seattle's existing**
7 **Stormwater Code. Relevant provisions of Seattle's Code can be found at SMC 22.802.010**
8 **(Exceptions) and 22.808.010 (Exemptions). Pending further analysis, Seattle would**
9 **propose including Seattle's existing requirements as an alternative to the Manual language.**
10 **As to last sentence, goal of NPDES is pollutant control, not broader guarantees.]**

- 11 ii. The local requirements must include a site planning process and BMP
12 selection and design criteria that, when used to implement the minimum
13 requirements in Appendix 1 (or equivalent requirement approved by
14 Ecology), will protect water quality, reduce the discharge of pollutants to the
15 maximum extent practicable, and satisfy the state requirement under chapter
16 90.48 RCW to apply all known, available, and reasonable methods of
17 prevention, control and treatment (AKART) prior to discharge. ~~Permittees~~
18 ~~must document how the criteria and requirements will protect water quality,~~
19 ~~reduce the discharge of pollutants to the maximum extent practicable, and~~
20 ~~satisfy the state AKART requirements.~~

21 The requirements of this subsection are met by Permittees who choose to use
22 the site planning process, and BMP selection and design criteria in the 2005
23 *Stormwater Management Manual for Western Washington*, or an equivalent
24 manual approved by the Department, who may cite this choice as their sole
25 documentation to meet this requirement.

26 **[NOTE TO ECOLOGY: Because Ecology is proposing to issue a prescriptive permit**
27 **which establishes MEP and AKART and meets NPDES obligations by requiring specific**
28 **actions, Ecology should clarify that the legal requirements stated in this subsection are met**
29 **when the Permittee follows the 2005 SMMWW (or Ecology approved equivalent). Without**
30 **this assurance that Permittees have fulfilled their obligations, the open ended requirements**
31 **to "protect water quality," reduce pollutants to MEP and meet AKART would be vague,**
32 **overbroad and uncertain and should be deleted. Furthermore, in an MS4 permit, all**
33 **requirements must be subject to MEP.]**

- 34 iii. The program must allow non-structural preventive actions and source
35 reduction approaches such as *Low Impact Development* Techniques (LID),
36 measures to minimize the creation of impervious surfaces, and measures to
37 minimize the disturbance of soils and vegetation.

- 38 iv. Deadlines for and Review of Local Manual and Ordinances. No later than ~~42~~
39 24 months from the effective date of this permit, each Permittee must adopt a

Tracked Changes and Notes on Main Text of the Permit

local program that meets the requirements in S5C.5.b.i through iii., above. Ecology review and approval of the local manual and ordinances is required. ~~To ensure compliance with the 12 month deadline,~~ Permittees may use the following review process:

- (1) The Permittee submits draft enforceable requirements, technical standards and manual to Ecology no later than ~~8~~ 18 months after the effective date of this permit. Ecology will review and provide full written response to the Permittee outlining all changes required for approval.
 - (2) If this review process is followed, the deadline for adoption of enforceable requirements, technical standards and manual shall be automatically extended by the number of calendar days that Ecology exceeds a 60 day period for full written response.
 - (3) In the case of circumstances beyond the Permittee's control, such as litigation or administrative appeals, that may result in noncompliance with the requirements of this section, the Permittee shall promptly notify Ecology and submit a written request for an extension. Extensions may be granted by Ecology.
- v. No later than ~~12~~ 24 months after the effective date of this permit, the program must establish legal authority within the limits of state and federal law to inspect private stormwater facilities and enforce maintenance standards for ~~all~~ new development and redevelopment approved under the provisions of this section.

[NOTE TO ECOLOGY: (See also comment on Fact Sheet (p. 33, lines 12-17) located in Attachment 3.) Please clarify Ecology's requirement of S5.C.5(b)iv. How does Ecology understand that a new requirement to establish local legal authority will respond to the legal limits placed by the McCready case, which are limits based in state and federal law? What new local authority, specifically, does Ecology anticipate?]

[NOTE TO ECOLOGY: Throughout S5.C.5, 12 months is insufficient time to produce new ordinance and manuals through the required municipal public process. City process for approving new ordinances requires at least 4-6 months from the time the ordinance is drafted and submitted to final approval. (1) Requirement in v.(1) gives only 8 months to have final drafts ready for Ecology review, which means bulk of stakeholder review and comment must have been completed prior to that time; (2) 60 day period after Ecology completes review for final public comment and City Council approval is insufficient time for public notice, SEPA, and GMA requirements to be met.]

- vi. No later than ~~18~~ 24 months after the effective date of this permit, the program must include a process of permits, plan review, inspections, and enforcement

Tracked Changes and Notes on Main Text of the Permit

capability designed to meet the following standards for both private and public projects, using *qualified personnel*:

- (1) Review ~~all~~ stormwater site plans submitted to Permittee for proposed development involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above.
- (2) Inspect prior to clearing and construction, all permitted development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i. and that have a high potential for sediment transport as determined through plan review generally based on definitions and requirements in Appendix 7 to determine appropriate temporary erosion and sediment control requirements. Or, as an alternative to the above, inspect all development sites involving land disturbing activity that meet the threshold in S5.C.5.b.i prior to issuing a final development permit to determine appropriate temporary erosion and sediment control requirements.

[NOTE TO ECOLOGY: Changing (2) above is essential to Seattle because it reflects the current and successful practice of the City. Rather than relying on information presented at the permit desk by applicants, Seattle reviewers conduct pre-permit site inspections to ascertain true site conditions. By this process, the permit that is eventually issued can be more accurately tailored to fit actual site conditions. If Ecology does not accept Seattle's recommendation, staff resource constraints may limit our ability to continue pre-permit site inspections. Reviewers will then have to revert back to relying on information presented by permit applicants, including the applicant's assessment of sediment transport potential.]

- (3) When notified that land disturbing activities have commenced, inspect all permitted development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above, during construction to ensure determine proper installation and maintenance of required erosion and sediment controls. Enforce as necessary based on the inspection. This inspection may be combined with other inspections provided it is still performed using qualified personnel.

[NOTE TO ECOLOGY: A development permit issued by Seattle is valid for 18 months from the time it is issued. Although permit holders can be required to notify the City that work has commenced, as a practical matter, this does not always occur. The change above is necessary because there is no effective remedy that would allow permittees to meet the intent of (3) above in those instances where work is completed before the jurisdiction is aware that it has been started.]

[NOTE TO ECOLOGY: In (3) and (4), the City can inspect and enforce, but cannot ensure the actions of others. Throughout the permit, the term "ensure" should be changed to a term more descriptive of the Permittee's task, as Ecology has already done in response

Tracked Changes and Notes on Main Text of the Permit

to comment in most cases. Seattle also suggests reinserting the final sentence in (3) and (4), which was in the preliminary draft.]

- (4) Inspect all development sites involving land disturbing activity that meet the threshold in S5.C.5.b.i.-upon completion of construction and prior to final approval/occupancy to ~~ensure~~ determine proper installation of permanent erosion controls and stormwater facilities/BMPs. Enforce as Permittee determines necessary based on the inspection. Also, require applicant to complete a maintenance plan and assign responsibility for maintenance. This inspection may be combined with other inspections provided it is still performed using qualified personnel.

[NOTE TO ECOLOGY: Seattle's recommendation above maintains consistency with the threshold for inspections and clarifies responsibility for maintenance following construction.]

- (5) Compliance with the inspection requirements of S5.C.5.(b)vi.(2), (3), and (4), above shall be determined by the presence of an established inspection program designed to inspect all sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i., above, and achieve inspection of 95% of sites.
- (6) The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records. Records of maintenance inspections and maintenance activities shall be maintained.
- (7) The program shall include an enforcement strategy to respond to issues of non-compliance.
- vii. No later than the effective date of this permit, the Permittee must make available the "Notice of Intent for Construction Activity" and/or copies of the "Notice of Intent for Industrial Activity" to representatives of proposed new development and redevelopment. Permittees will continue to enforce local ordinances controlling runoff from sites that are also covered by stormwater permits that are issued by Ecology.
- viii. No later than 18 months after the effective date of this permit, each permittee shall ~~ensure~~ provide training designed that all permittees's staff responsible for whose primary job duties are implementing the program to Control Stormwater Runoff from New Development, Redevelopment, and Construction Sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training shall be provided as Permittee determines is needed to address changes in procedures, techniques or staffing. Permittees shall

Tracked Changes and Notes on Main Text of the Permit

document and maintain records of the training provided and the staff trained.

[NOTE TO ECOLOGY: Employers provide training to employees based on primary job assignments and provide follow-up as the employer determines there is need.]

6. Structural Stormwater Controls

- a. The SWMP shall include a program to ~~construct structural stormwater controls to address impacts to beneficial uses resulting from disturbances to watershed hydrology and~~ reduce stormwater pollutant discharges from existing development by retrofitting existing infrastructure to incorporate water quality improvement. This program shall consider impacts caused by stormwater discharges from areas of existing development, including runoff from highways, streets and roads owned or operated by the Permittee, ~~and areas of new development, where impacts are anticipated as development proceeds.~~ This program shall address impacts that are not adequately controlled by the other required actions of the SWMP, and shall provide proposed projects and ~~an implementation~~ construction schedule.

The program shall consider the construction of projects such as ~~regional flow control facilities, water quality treatment facilities, and retrofitting of existing flood-flow control facilities to provide water quality functions.~~ Permittees ~~should also consider other means to address impacts from existing development, such as reduction of hydrologic changes through the use of on-site (infiltration and dispersion) stormwater management BMPs, and site design techniques, habitat acquisition or restoration of forest cover and riparian buffers, for compliance with this requirement.~~ Permittees may not use in-stream culvert replacement projects for compliance with this requirement.

[NOTE TO ECOLOGY: (1) Flow control and habitat requirements are not appropriate to a water quality- based permit. (2) The proposed changes attempt to clearly distinguish the structural stormwater controls required in this section from those required under section 5 (controlling runoff from new and redevelopment). Public road improvement projects that trigger stormwater treatment requirements under Seattle Code are covered in Section 5. Suggest modifying language in Section 6 to apply only to projects that retrofit existing infrastructure or the purpose of improving water quality and leave Section 5 to cover new development (either private or public projects that involve roads). This change would eliminate potential confusion and allow Section 6 to focus entirely on retrofitting existing public infrastructure to improve water quality.]

b. Minimum Performance Measures:

- i. No later than 18 months after the effective date of this permit, each Permittee shall develop and begin implementing a Structural Stormwater Control program designed to control stormwater impacts that are not adequately

Tracked Changes and Notes on Main Text of the Permit

controlled by the other required actions of the SWMP. Permittees shall provide a list of planned individual projects that are scheduled for implementation during the term of this permit. Updates and revisions to the list will be provided in the annual report.

The Structural Stormwater Control program may also include a program designed to implement small scale projects that are not planned in advance.

ii. Each Permittee shall include a description of the Structural Stormwater Control Program in the written documentation of their SWMP that must be submitted with the first year annual report. The description of the Structural Stormwater Control Program must include the following:

- The goals that the Structural Stormwater Control Program are intended to achieve.
- The planning process used to develop the Structural Stormwater Control Program, including: the geographic scale of the planning process, the issues and regulations addressed, the steps in the planning process, the types of characterization information considered, the amount budgeted for implementation, and the public involvement process.

iii. For planned individual projects, provide the following information:

- The estimated pollutant load reduction that will result from each project designed to provide stormwater treatment.
- ~~The expected outcome of each project designed to provide flow control.~~

[NOTE TO ECOLOGY: Flow control performance is not appropriate to this permit.]

- Any other expected environmental benefits.
- Planned monitoring or evaluation of the project and monitoring/evaluation results, if any.

iv. Information about the Structural Stormwater Control Program shall be updated with each annual report.

7. Source Control Program for Existing Development

- a. The SWMP shall include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the Permittee. The program shall include the following elements within the limits of local, state and federal law, and implemented by the minimum performance measures, below:
- i. Requiring application of operational and structural source control BMPs, and, if necessary, treatment BMPs to pollution generating sources associated with existing land uses and activities, to the extent allowed by state or federal law.

Tracked Changes and Notes on Main Text of the Permit

[NOTE TO ECOLOGY: Seattle would like the requirement to impose structural source control and/or treatment BMPs on existing land uses to be clearly bounded by the last phrase.]

ii. Inspections of pollutant generating sources at commercial, industrial and multifamily properties to enforce implementation of required BMPs to control pollution discharging into municipal separate storm sewers owned or operated by the Permittee.

iii. Application and enforcement of local ordinances at applicable sites, including sites that are also covered by other stormwater permits issued by Ecology. Permittees that are in compliance with the terms of this permit ~~will~~shall not be held liable by Ecology for water quality standard violations or receiving water impacts caused by industries and other permittees covered, or which should be covered under an NPDES permit issued by Ecology.

iv. Reduction of pollutants associated with the application of pesticides, herbicides, and fertilizer discharging into municipal separate storm sewers owned or operated by the Permittee.

b. Minimum Performance Measures for Source Control Program:

i. No later than ~~12~~24 months after the effective date of this permit, adopt and begin enforcement of an ordinance, or other enforceable documents, requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities (See Appendix ~~38~~, to identify pollutant generating sources), within the limits of state and federal law.

~~The local source control requirements must include operational and structural source control BMPs that, when used on a site-specific basis sites, will protect water quality, reduce the discharge of pollutants to the maximum extent practicable, and satisfy the state requirement under chapter 90.48 RCW to apply all known, available, and reasonable methods of prevention, control and treatment (AKART) prior to discharge. Permittees must document how the stormwater source control BMP selection process for different activities and land uses, the types of BMPs and design criteria for those BMPs will protect water quality by reducing the discharge of pollutants to the maximum extent practicable, and satisfy the state AKART requirements.~~

The requirements of this subsection are met by Permittees who choose to use the source control BMPs in Volume IV of the 2005 Stormwater Management Manual for Western Washington, or an equivalent manual approved by Ecology, who may cite this choice as their sole documentation to meet this requirement. In regard to an equivalent manual, more stringent requirements

Tracked Changes and Notes on Main Text of the Permit

may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds must provide similarly protective levels of pollutant control as compared with Volume IV.

[NOTE TO ECOLOGY: Because Ecology is proposing to issue a prescriptive permit which establishes MEP and AKART and meets NPDES obligations by requiring specific actions, Ecology should clarify that the legal requirements stated in this subsection are met when the Permittee follows the 2005 SMMWW (or Ecology approved equivalent). Without this assurance that Permittees have fulfilled their obligations, the open-ended requirements to “protect water quality,” reduce pollutants to MEP and meet AKART would be vague, overbroad and uncertain and should be deleted. Furthermore, in an MS4 permit, all requirements must be subject to MEP.]

Ecology review and approval of the ordinance, or other enforceable documents, and source control BMPs is required. Each Permittee must submit the proposed source control program and all necessary documentation to Ecology for review, the deadline for doing so is no later than 9 18 months after the effective date of this permit. If Ecology does not request changes within 30 days, the proposed source control BMPs are considered approved.

[NOTE TO ECOLOGY: Because source control BMPs and related ordinances are tied to our Stormwater Code, the change in deadlines has been adjusted to match the proposal from S5.C.5.]

Permittee’s program shall be designed to require ~~Operational~~ source control BMPs ~~shall be required~~ for all pollutant generating sources; ~~and- s~~ Structural source control BMPs ~~shall be required~~ within the limits of state and federal law, for pollutant generating sources if operational source control BMPs are determined by Permittee not to be effective, resulting in an illicit discharge or causing or contributing to a violation of surface water, ground water, or sediment management standards ~~because of inadequate stormwater controls~~. Implementation of source control requirements may be done through education and technical assistance programs, provided that formal enforcement authority is available to the Permittee and is used as determined necessary by the Permittee.

- ii. No later than 12 months after the effective date of this permit, establish a program to identify sites which are potentially pollution generating. The program shall include:

- (1) Estimating the inventory of land uses/businesses using the categories of land uses and businesses in Appendix 8. The permittee shall update the inventory regularly.

Tracked Changes and Notes on Main Text of the Permit

(2) Complaint-based response to identify other pollutant generating sources, such as mobile or home-based businesses

iii. Starting no later than 24 months after the effective date of this permit, implement a self audit/inspection program for sites identified pursuant to S5.C.7.b.ii above-, with adequate enforcement capability to ensure implementation of source control BMPs in accordance with the ordinance required in S5.C.7.b.i., above.

[NOTE TO ECOLOGY: The City can inspect and enforce, but cannot ensure the actions of others.]

(1) All identified sites with a business address shall be provided, by mail, with information about activities that may generate pollutants and the source control requirements. Businesses may self-certify compliance with the source control requirements. The permittee shall inspect 20% of these sites annually to assure BMP effectiveness and compliance with source control requirements.

(2) Each permittee shall inspect 100% of sites identified through legitimate complaints.

iv. No later than 24 months after the effective date of this permit, each Permittee shall implement a progressive enforcement policy, within the limits of state and federal law, to require ~~that facilities are brought to come~~ into compliance with stormwater requirements within a reasonable time period as specified below:

(1) In the event that a Permittee determines, based on an inspection conducted above, that a site has failed to adequately implement all the required ~~necessary~~ BMPs, ~~that~~ Permittee shall take progressive enforcement including, as appropriate, phone calls, reminder letters or follow up inspections within 30 days from the date of the initial inspection, or other time period as specified in the corrective action letter.

(2) When a Permittee determines that a facility has failed to adequately implement BMPs after a follow-up inspection, ~~that the~~ Permittee shall take further enforcement action as established through authority in its municipal code and ordinances, or through the judicial system.

(3) Each Permittee shall implement practices to maintain records, including documentation of ~~each~~ site visits, inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance. Each permittee shall also maintain records of sites that are not inspected because the property owner or operator denies entry.

Tracked Changes and Notes on Main Text of the Permit

(4) A Permittee may refer violations of local ordinances to Ecology provided that the Permittee also makes a good faith effort of progressive enforcement. At a minimum a Permittee's enforcement effort must include documentation of inspections and warning letters or notices of violation.

- v. No later than 24 months after the effective date of this permit, each permittee shall ~~ensure~~ provide training designed such that all Permittee's staff responsible for whose primary job duties are implementing the source control program are trained to conduct these activities. The training shall cover the legal authority for source control (adopted codes, ordinances, rules, etc.), source control BMPs and their proper application, inspection protocols, and enforcement procedures. Follow-up training shall be provided as Permittee determines is needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

[NOTE TO ECOLOGY: Employers provide training to employees based on primary job assignments and provide follow-up as the employer determines there is need.]

8. *Illicit Connections* and Illicit Discharges Detection and Elimination

- a. The SWMP shall include an ongoing program to detect, remove and prevent illicit connections and illicit discharges, including spills, into the municipal separate storm sewers owned or operated by the Permittee.
- b. Minimum Performance Measures:
- i. No later than the effective date of this permit, each Permittee must continue implementing an on-going program to prevent, identify and respond to illicit connections and illicit discharges within the limits of state and federal law. The program shall include procedures for reporting and correcting or removing illicit connections, spills and other illicit discharges when they are suspected or identified. ~~The program shall also include procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4.~~ Illicit connections and illicit discharges shall be identified through field screening, inspections, complaints/reports, construction inspections, maintenance inspections, source control inspections, and/or monitoring information, as appropriate.

[NOTE TO ECOLOGY: Deleted section is inappropriate for continuing obligations as of the effective date of the permit; also, Seattle assumes that Ecology would seek to address linkage between MS3s, not MS4s.]

- ii. No later than 12 months after the effective date of this permit, each Permittee shall evaluate, and if necessary update, existing ordinances or other regulatory mechanisms to effectively prohibit non-stormwater, illegal

Tracked Changes and Notes on Main Text of the Permit

discharges, and/or dumping into the Permittee's municipal separate storm sewer system, ~~to the maximum extent as allowable under State and federal law,~~ and provide for enforcement provisions and procedures.

[NOTE TO ECOLOGY: Words like "maximum extent allowable" should be deleted because they unnecessarily create uncertainty and risk rather than accomplishing the permit's task of prescribing actions and activities that will improve stormwater quality. This will divert resources away from stormwater programs. Last phrase has been to replace S5.C.8.B.ii.(5)]

(1) The regulatory mechanism required in S5.C.8.b.ii, above, does not need to prohibit the following categories of non-stormwater discharges, unless the discharges are identified by Permittee as significant sources of pollutants to waters of the State:

- Lawn watering and landscape irrigation;
- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
- Uncontaminated pumped ground water;
- Water line flushing and discharges from potable water sources;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water from agricultural sources that is commingled with urban stormwater;
- Springs;
- Water from crawl space pumps;
- Footing drains; and
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Street wash water; and
- Individual Residential Car Washing.

[NOTE TO ECOLOGY: Clean Water Act regulations at 40 CFR 122.26(d)(2)(iv)(B)(1) allow the added discharges above not to be considered illicit and not to prohibited from the MS3. Seattle appreciates and shares Ecology's desire to improve the environment.]

Tracked Changes and Notes on Main Text of the Permit

However, Seattle disagrees with Ecology exceeding the Clean Water Act mandate to require Permittees to prohibit or regulate the discharge of water from common activities that are better regulated in other ways. A municipal stormwater permit is not the place to restrict individual residential car washing through the back door.]

[NOTE TO ECOLOGY: Amendments are suggested below in the event that Ecology does not accept Seattle's comment above. In particular, the types of potable water sources should not be restricted. The second, fourth, and fifth bullets below are not conditions for the discharge, but instead emphasize permittee program requirements, as this redrafting shows.]

(2) The regulatory mechanism required in S5.C.8.b.ii, above, ~~shall need not~~ prohibit the following categories of non-stormwater discharges if (1) local regulatory prohibitions condition the discharges as stated below or (2) where a Permittee program is mentioned below rather than a condition, the Permittee has such a program developed on the timeline required elsewhere in the permit unless the following conditions following each listed category are being met:

- Discharges from potable water sources, including but not limited to water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Conditions: Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments;
- Discharges from lawn watering and other landscape irrigation runoff. Program: Permittee has a program designed to reduce ~~These discharges, such as must be reduced through, at a minimum, public education activities (see S5.C.10) and/or water conservation efforts.~~
- Dechlorinated swimming pool discharges. Conditions: The Planned discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash ~~shall not be discharged to the MS4 do not meet the conditions.~~
- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. Program: Permittee has a program designed to reduce ~~The Permittee shall reduce these discharges, such as through, at a minimum, public education activities (see S5.C.10) about minimizing the amount of street wash and dust control water entering the MS3 and promoting street sweeping before washing streets, and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees must~~

Tracked Changes and Notes on Main Text of the Permit

~~minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.~~

- Individual residential car washing. Program: Permittee has a program of public education activities (see S5.C.10) emphasizing best management practices such as directing runoff to vegetated areas where it can infiltrate, directing the runoff to the sanitary sewer, or using commercial facilities.

[NOTE TO ECOLOGY: The draft Fact Sheet states that Ecology requires an ordinance prohibiting individual car washing, but generally expects that Permittees will not enforce such an ordinance. Seattle's recommendation above is presented as an alternative to enacting but not enforcing laws. It also avoids uncertainty among our citizens regarding where such an ordinance will apply, given that approximately 1/3 of Seattle is served by an MS4, 1/3 by a combined sewer system, and 1/3 by a partially separated system. It is uncertain whether prohibiting residential car washing is the best use of scarce resources. The above provision for individual car washing reflects a step in the right direction and is consistent with other types of discharges described in this section. In addition, education regarding car washing practices may be a successful tool in managing this type of discharge and is required in section S5.C.10.]

- (3) The Permittee's SWMP shall, at a minimum, address each category in (2) above in accordance with the conditions stated therein.
- (4) The SWMP must further address any category of discharges in (1) or (2) above if the discharges are identified by Permittee as significant sources of pollutants to waters of the State.
- ~~(5) The regulatory mechanism required in S5.C.8.b.ii, above, shall include all appropriate enforcement provisions and procedures as allowed under State Law.~~

[NOTE TO ECOLOGY: Incorporated into S.5.C.8.B.ii; see comment.]

- iii. No later than 18 months after the effective date of this permit, each Permittee shall ~~ensure~~ provide training designed to train the ~~that all~~ municipal field staff that Permittee determines have primary job duties ~~who are responsible for~~ of identification, investigation, termination, cleanup, and reporting illicit discharges, including spills, improper disposal and illicit connections ~~are trained~~ to conduct these activities. Follow-up training shall be provided as Permittee determines is needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.

[NOTE TO ECOLOGY: Given advancement, promotion, new hires, and other turnover rates, coupled with individual schedules and emergent work priorities, achieving a 100%

Tracked Changes and Notes on Main Text of the Permit

record of training is not feasible. Employers should provide training to employees based on primary job assignments and provide follow-up as the employer determines there is need.]

- iv. No later than 24 months after the effective date of this permit, develop and implement an ongoing training program designed for all municipal field staff, that Permittee determines ~~which~~ as part of their ~~normal~~ primary job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system ~~shall be trained~~ on the identification of an illicit discharge/connection and on the proper procedures for reporting and responding to the illicit discharge/connection. Follow-up training shall be provided as Permittee determines is needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.
- v. Each Permittee shall continue to provide a publicly listed water quality citizen complaints/reports telephone number. This program shall be in place no later than the effective date of this permit. Complaints shall be responded to in accordance with S5.C.8.b.vii. and viii., below.
- vi. Each Permittee shall conduct on-going screening to detect illicit connections using the methods identified in Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, (October 2004) OR similar.
 - (1) Each City covered under this permit shall complete an Outfall Reconnaissance Inventory for each stream and shoreline within the Permittee's incorporated area 180 days prior to expiration of the permit.

[NOTE TO ECOLOGY: (1) Given the magnitude of the effort to screen all of the separate storm drains in the City for illicit connections (Seattle operates and maintains an estimated 460 miles of municipal storm drain mainlines), it is recommended that the schedule for completing the work be extended. Suggest using similar approach to the business inspection effort (e.g., complete 60 percent within the 5-year permit period). Ongoing screening once the initial sweep is completed should focus on only those sites that are issued a side sewer permit in subsequent years. (2) Because illicit discharges are sporadic (e.g., spills, direct discharges) and often occur during non-business hours, they are difficult to track using field screening techniques. Seattle generally responds to complaints received on its hotline number from the public and other agencies to control illicit discharges. Field screening techniques are more applicable to identifying illicit connections where discharges occur on a more frequent basis.]

- (2) Each County covered under this permit shall prioritize streams and shorelines in urban/higher density rural subbasins for screening and shall complete an Outfall Reconnaissance Inventory for at least half of

Tracked Changes and Notes on Main Text of the Permit

streams and shorelines in these areas 180 days prior to expiration of this permit.

vii. Response to Illicit Connections

- (1) Investigation: Upon discovery or upon receiving a report of a suspected illicit connection, Permittees shall initiate an investigation within 21 days, to determine the source of the connection, the nature and volume of discharge through the connection, and the responsible party for the connection.
- (2) Termination: Upon confirmation of the illicit nature of a storm drain connection, Permittees shall use their enforcement authority and work with the property owner in a documented effort to eliminate the illicit connection within 6 months.
- (3) A permittee may refer illicit connection violations to Ecology provided that the Permittee also makes a good faith effort of progressive enforcement. At a minimum a Permittee's enforcement effort must include documentation of inspections and warning letters or notices of violation.

viii. No later than 6 months after the effective date of this permit, each Permittee shall develop and implement procedures to ~~prevent, investigate,~~ respond to and, if deemed appropriate, clean up spills and improper disposal into municipal separate storm sewers owned or operated by the Permittee. ~~Investigate, within 7 days on average, any complaints/reports or monitoring information that indicates a potential illicit discharge, including a spill or illegal dumping. These procedures shall require that each Permittee shall investigate problems/violations it judges. Immediately respond to problems/violations judged to be urgent, severe, or an emergency, within 24 hours of being notified that a problem/violation exists.~~

[NOTE TO ECOLOGY: Believe the intent of paragraph ix regards actions after spills/improper disposal and not procedures "to prevent." Seattle Public Utilities receives water quality complaints from two sources, the complaint line for the general public that is maintained during business hours and operations control center (OCC) dispatch, which is operated 24 hours a day, 7 days a week and receives calls from City and other agency staff. OCC refers spills to SPU spill coordinators that are on call 24-7. The complaint line refers callers to the OCC for emergency situations (and provides guidance on what is considered an emergency). However, callers may not always call the OCC. Consequently, SPU may not immediately learn of a problem, particularly for spills that occur during non-business hours. Finally, if Ecology does not elect to accept Seattle's comments, any requirement to act must reasonably be based on the Permittee's knowledge and awareness of a problem, with real-world times in which to respond.]

Tracked Changes and Notes on Main Text of the Permit

- ix. Each Permittee shall track and maintain records of the illicit discharge detection and elimination program, including documentation of inspections, complaint/spill response and other enforcement records.

9. Operation and Maintenance Program

- a. The SWMP shall include a program to regulate maintenance activities and to conduct maintenance activities by the Permittee that prevent or reduce stormwater impacts. Within the limits of state and federal law the program shall include elements aimed at:

- i. Maintenance standards and programs for proper and timely maintenance of public and private stormwater facilities.
- ii. Practices for operating and maintaining Permittee's streets, roads, and highways to reduce stormwater impacts.
- iii. Policies and procedures to reduce pollutants associated with the application of pesticides, herbicides, and fertilizer by the Permittee's agencies or departments.
- iv. Practices for reducing stormwater impacts from *heavy equipment maintenance or storage yards*, and from *material storage facilities* owned or operated by the Permittee.
- v. A training component.

b. Minimum Performance Measures:

- i. Maintenance Standards. No later than ~~42~~ 24 months after the effective date of this permit, each Permittee must establish maintenance standards that are ~~as protective or more protective of facility function than determined by Ecology to be equivalent to those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington. The Permittee shall submit proposed standards for Ecology review and approval. More stringent requirements may be used, and /or certain requirements may be tailored to local circumstances through the use of basin plans or other water quality and/or quantity planning efforts. Such local requirements must provide similarly protective levels of pollutant control as compared to Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.~~

[NOTE TO ECOLOGY: The 24 month implementation date aligns this requirement with S7.C.5 and S7.C.7, all now tied to revised City Stormwater Code and Technical Manuals. Seattle suggests that Ecology review and approve the maintenance standards in a manner similar to the source control requirements.]

Tracked Changes and Notes on Main Text of the Permit

The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not intended to be measures of the facility's required condition at all times between inspections. Exceeding these conditions at any time between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. Generally speaking, these standards are violated when an inspection identifies a required maintenance action related to facility function, and that action is not performed as required, for example, within 6 months for typical maintenance, within 9 months for revegetation, and within 2 years for maintenance that requires capital construction of less than \$25,000.

ii. Maintenance of *stormwater facilities regulated by the Permittee*

- (1) No later than ~~1 year~~ 2 years after the effective date of this permit, each Permittee shall evaluate and, if necessary, update existing ordinances or other enforceable documents requiring maintenance of *stormwater facilities regulated by the Permittee, as determined by Permittee* ~~all permanent stormwater treatment and flow control facilities regulated by the Permittee (including catch basins),~~ in accordance with maintenance standards established under S5.C.9.b.i, above. Permittee shall compile a list of *stormwater facilities regulated by the Permittee* once during the permit term, to guide implementation of this maintenance subsection.

[NOTE TO ECOLOGY: The 24 month implementation date aligns this requirement with S7.C.5 and S7.C.7, all now tied to revised City Stormwater Code and Technical Manuals.]

[NOTE TO ECOLOGY: Ecology should either use its new definition, or make this section consistent with any definitions. See comments on definition. Permittee should be the entity to determine what facilities qualify, to guide implementation of this subsection.]

- (2) No later than ~~1 year~~ 2 years after the effective date of this permit, each Permittee shall develop and implement an initial inspection schedule for *stormwater facilities regulated by the Permittee designed* ~~all known, permanent stormwater treatment and flow control facilities (other than catch basins) regulated by the Permittee~~ to inspect each facility at least once during the term of this permit to enforce compliance with adopted maintenance standards as needed based on the inspection.

- (3) No later than 4 years after the effective date of this permit, each Permittee shall develop an on-going inspection schedule for implementation after the initial schedule to annually inspect ~~all~~

Tracked Changes and Notes on Main Text of the Permit

~~stormwater facilities regulated by the Permittee~~ ~~stormwater treatment and flow control facilities (other than catch basins) regulated by the Permittee.~~ The annual inspection schedule may be changed to a lesser or greater frequency of inspection, as deemed by Permittee to be appropriate to meet the maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.

[NOTE TO ECOLOGY: It seems that this statement requires permittees to inspect every private detention facility & every private treatment facility once every year. According to Seattle's fourth year report, it took four years to inspect 400 private detention facilities. Based on this, the above requirement represents a significant increase in the level of effort placed on Seattle's inspection staff. Additionally, if Ecology intends this requirement to include every private rain garden, soil amendment, and green roof that has been constructed and subject to an MOA with the City, this represents a significant disincentive to build these facilities.]

- (4) No later than 2 years after the effective date of this permit each Permittee shall manage maintenance activities to inspect all new permanent stormwater treatment and flow control facilities, including catch basins, in new residential developments every 6 months during the period of heaviest house construction (i.e., 1 to 2 years following subdivision approval) to identify maintenance needs and enforce compliance with maintenance standards as needed.
- (5) Compliance with the inspection requirements of S5.C.9.b.ii.(2),(3), and (4), above, shall be determined by the presence of an established inspection program designed to inspect ~~all such~~ sites, and achieving inspection of ~~95~~80% of ~~all such~~ sites during the permit term.
- (6) The Permittee shall require cleaning of catch basins regulated by the permittee if they are found to be out of compliance with established maintenance standards ~~in the course of inspections conducted at facilities under the requirements of S5.C.7 (Source Control Program), and S5.C.8 (Illicit Connections and Illicit Discharges Detection and Elimination), or if the catch basins and~~ are part of the treatment or flow control systems inspected under the requirements of S5.C.9.

[NOTE TO ECOLOGY: Any requirements associated with other sections need to be placed in those other sections.]

iii. Maintenance of stormwater facilities owned or operated by the Permittee

- (1) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to inspect all permanent stormwater treatment and flow control facilities (other than catch basins)

Tracked Changes and Notes on Main Text of the Permit

owned or operated by the Permittee annually (as determined by a list compiled by the Permittee once during the permit term), and implement appropriate maintenance action in accordance with adopted maintenance standards. The annual inspection schedule may be changed to a lesser or greater frequency of inspection as deemed by Permittee to be appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for permanent stormwater treatment and flow control facilities, the permittee may substitute written statements, including the signature certification in General Condition G19, proposing a specific less frequent inspection schedule, based on actual inspection and maintenance experience.

[NOTE TO ECOLOGY: Permittee should be the entity to determine what facilities qualify, to guide implementation of this subsection.]

- (2) No later than 24 months after the effective date of this program each Permittee shall begin implementing a program to conduct spot checks of potentially damaged known, permanent treatment and flow control facilities (other than catch basins) owned or operated by Permittee after major storm events (24 hour storm event with a 40 greater than 25 year recurrence interval). If spot checks indicate widespread damage/maintenance needs, Permittee will initiate a program to inspect all such stormwater treatment and flow control facilities that may be affected.— And to cConduct repairs or take appropriate maintenance action in accordance with maintenance standards established under S5.C.9.b.i, above, based on the results of the inspections.
- (3) Compliance with the inspection requirements of S5.C.9.b.iii.(1) and (2), above, shall be determined by the presence of an established inspection program designed to inspect all such sites, and achieving inspection of 9580% of all such sites during the permit term.

iv. Maintenance of Catch Basins Owned or Operated by the Permittee

- (1) No later than 24 months after the effective date of this permit each Permittee shall begin implementing a program to annually inspect catchbasins and inlets owned or operated by the Permittee.
- Inspections may be conducted on a “circuit basis” whereby a sampling of catchbasins and inlets within each circuit is inspected to identify maintenance needs. Include in the sampling an inspection of the catchbasin immediately upstream of any system outfall. Clean all catchbasins within a given circuit at one time if the inspection sampling indicates cleaning is needed to comply with maintenance standards established under S5.C.9.b.i, above.

Tracked Changes and Notes on Main Text of the Permit

- As an alternative to inspecting catchbasins on a “circuit basis,” the Permittee may inspect all catchbasins, and clean only catchbasins where cleaning is needed to comply with maintenance standards.

[NOTE TO ECOLOGY: Seattle would appreciate clarity on this particular requirement, especially as to more detailed methodology on inspection of catch basins on a “circuit basis”. As currently written, there can be significant variation on the interpretation of the language.]

- (2) The annual inspection schedule for may be changed to a lesser or greater frequency of inspection as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency. In the absence of maintenance records for catch basins, the permittee may substitute written statements, including the signature certification in General Condition G19, proposing a specific less frequent inspection schedule, not to exceed three years, based on actual inspection and maintenance experience.

- (3) ~~The disposal of decant water shall be in accordance with the requirements in Appendix 6.~~

[NOTE TO ECOLOGY: See comments to Appendix 6, in a separate Seattle Attachment, regarding the overreaching nature of this requirement. An alternative would be for the permit to offer Appendix 6 as non-mandatory guidance, for informational purposes only.]

- v. Records of inspections and maintenance or repair activities conducted by the Permittee shall be maintained. Records of maintenance or repair requiring capital construction of \$25,000 or more shall be maintained and provided in the annual report.
- vi. Establish practices to reduce stormwater impacts associated with runoff from parking lots, streets, roads, and highways owned or operated by the permittee in the permittee’s MS4 geographical area; and road maintenance activities owned, operated, or conducted by the permittee in the permittee’s MS4 geographical area, within ~~12~~ 18 months of the effective date of this permit.

Implementation of practices shall begin no later than 18 months after the effective date of this permit, and continue on an ongoing basis throughout the term of the permit. ~~The following~~ Examples of activities include, but are not limited to: ~~must be addressed:~~

- (1) Pipe cleaning
- (2) Cleaning of culverts that convey stormwater in ditch systems
- (3) Ditch maintenance
- (4) Street cleaning

Tracked Changes and Notes on Main Text of the Permit

- (5) Road repair and resurfacing, including pavement grinding
 - (6) Snow and ice control
 - (7) Utility installation
 - (8) Maintaining roadside areas, including vegetation management.
 - (9) Dust control
 - (10) Pavement striping maintenance
- vii. No later than ~~12~~ 18 months after the effective date of this permit each Permittee shall establish and implement policies and procedures to reduce pollutants in discharges from lands owned or maintained by the Permittee subject to this permit in the permittee's MS4 geographical area, including but not limited to: parks, open space, road right-of-ways, maintenance yards, and at stormwater treatment and flow control facilities. These policies and procedures ~~must address~~ may include, but are not limited to:
- (1) Application of fertilizer, pesticides, and herbicides, including the development of Nutrient management and *Integrated Pest Management* Plans
 - (2) Sediment and erosion control
 - (3) Landscape maintenance and vegetation disposal
 - (4) Trash management
 - (5) Building exterior cleaning and maintenance
- viii. No later than 2 years after the effective date of this permit, develop and implement an ongoing training program for appropriate employees of the Permittee ~~whose~~ who have primary construction, operations or maintenance job functions that are likely to ~~may~~ impact stormwater quality. The Permittee shall identify target employees to participate in the training sessions. The training program shall address the importance of protecting water quality, the requirements of this permit, operation and maintenance standards, inspection procedures, selecting appropriate BMPs, ways to perform their job activities to prevent or minimize impacts to water quality, and procedures for reporting water quality concerns, including potential illicit discharges. Follow-up training shall be provided as the Permittee determines is needed to address changes in procedures, techniques or staffing. Permittees shall document and maintain records of the training provided and the staff trained.
- ix. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the Permittee in the Permittee's MS4

Tracked Changes and Notes on Main Text of the Permit

geographical area ~~in areas~~ subject to this permit, that are not covered under the Industrial Stormwater General permit. Locations shall be determined by a list made by Permittee once during the permit term. The SWPPPs must be developed within 18 months of the effective date of this permit. Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement. The SWPPP shall include periodic visual observation of discharges from the facility to evaluate the effectiveness of BMPs.

[NOTE TO ECOLOGY: Does Ecology intend to use the definitions for heavy equipment maintenance or storage yards and material storage facilities? See comments on definitions. Permittee should be the entity to determine what facilities qualify, to guide implementation of this subsection.]

10. Education and Outreach Program

- a. The SWMP shall include an education program aimed at an appropriate target audience of residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the Permittee. The target audience and education program isare to be defined by the Permittee. The overall goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts to receiving waters. An education program may be developed locally or regionally.
- b. Minimum Performance Measures:
 - i. No later than 12 months after the effective date of this permit each Permittee shall develop and begin implementation (or participate in) of an education and outreach program that uses a variety of methods designed to reach target ~~the audiences and topics listed in II, below.~~ The outreach program shall be designed to achieve measurable improvements in each target audience's understanding of the problem and what they can do to solve it, and measurable improvements in the percentage of each target audience regularly carrying out the intended action or behavior change.
 - ii. The education and outreach program shall be designed to increase regular adoption of the following behaviors in the following target audiences by the expiration date of this permit:
 - (1) Awareness among the general public of the importance of improving water quality, reducing impervious surfaces, and protecting the existing and designated uses of waters of the state and the potential impacts caused by stormwater discharges, and promote specific actions and opportunities for avoiding, minimizing, reducing and/or eliminating the

Tracked Changes and Notes on Main Text of the Permit

- adverse impacts of stormwater runoff, especially through the use of source control BMPs.
- (2) Awareness of natural yard care techniques (e.g. composting lawn and yard clippings, using compost and mulch, using natural organic fertilizers, watering infrequently and deeply) among homeowners, the general public, landscape professionals, and property managers to protect water quality.
- (3) Awareness by homeowners, the general public, landscape professionals, and property managers of the need to protect water quality by reducing their purchase of and properly storing, using and disposing of pesticides, fertilizers, and other yard care chemicals.
- (4) Awareness by the general public and businesses of the need to protect water quality by reducing their purchase of and properly storing, using, and disposing of automotive chemicals, hazardous cleaning supplies, and other hazardous materials, and by facilitating use of source control BMPs that minimize the discharge of soap/detergents (e.g., supplying or providing grant funding for carwash kits, etc.).
- (5) Use of technical standards to develop stormwater site plans and erosion control plans, and the use of *Best Management Practices* to mitigate contaminated runoff and the quantity of runoff from development sites by engineers, construction contractors, developers, development review staff, and land use planners.
- (6) Understanding and use of Low Impact Development (LID) techniques (e.g. appropriate site design, pervious paving, full dispersion BMPs, and retention of forests and mature trees) among engineers, contractors, developers, architects, landscape architects, realtors, and potential home buyers to avoid or minimize stormwater impacts of new development.
- (7) Awareness by small businesses and the general public about the impacts of illicit discharges and encourage their identification and removal to avoid impacts to water quality.
- (8) Involvement the general public in environmental stewardship activities (e.g. habitat restoration and community involvement and education projects) to increase awareness of the importance of water quality and mitigate, reduce, or eliminate adverse impacts of stormwater runoff.
- iii. Each permittee shall implement or participate in an effort to measure understanding and adoption of the targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively as well as to evaluate changes in adoption of the targeted behaviors. Meeting this requirement also satisfies

Tracked Changes and Notes on Main Text of the Permit

the requirement of S8.B.a (Stormwater Management Program effectiveness Monitoring) to evaluate the effectiveness of a targeted action (or narrow suite of actions).

[NOTE TO ECOLOGY: The requirement above clearly meets the intent of S8.B.a. and it should be so stated. Permittees, however, retain the option of conducting monitoring to evaluate a different targeted action under S8.B.a if so desired.]

- iv. Each permittee shall track and maintain records of public education activities.

S6. STORMWATER MANAGEMENT PROGRAM FOR CO-PERMITTEES AND SECONDARY PERMITTEES

[NOTE TO ECOLOGY: Seattle has not repeated all of its tracked changes/comments below to avoid confusion, but for the record Seattle makes the same comments HERE as in S5, above, as applicable.]

- A. This section applies to all Secondary Permittees and Co-Permittees, whether coverage under this Permit is obtained individually or as a Co-Permittee with a City and/or Town and/or County and/or another Secondary Permittee.

Each Co-Permittee and Secondary Permittee shall develop and implement a stormwater management program (SWMP) during the term of this permit. ~~The SWMP shall be designed to reduce the discharge of pollutants from regulated small MS4s to the maximum extent practicable and protect water quality.~~ Development and implementation of stormwater management programs required under this permit constitute the controls necessary to reduce the discharge of pollutants to MEP and meet state AKART requirements. For the purpose of this permit a SWMP for a Co-Permittee or Secondary Permittee is a set of actions and activities comprising the components in this Special Condition as outlined below. All applicable components are mandatory and must be implemented by each Co-Permittee or Secondary Permittee within the limits of state and federal law. SWMP components and other permit terms do not require permittees to violate or exceed the limits or authorizations set by any local state or federal law. The SWMP must be developed and implemented in accordance with the schedules contained in this section and shall be fully developed and implemented 180 days before the expiration date of this Permit. Notwithstanding the schedules contained in this section for implementation of SWMP components, Secondary Permittees that are already implementing some or all of the SWMP components in this section shall continue implementation of those components of their SWMP.

Each Co-Permittee and Secondary Permittee shall track the cost of development and implementation of the SWMP required by this section. This information shall be included in the annual report.

Tracked Changes and Notes on Main Text of the Permit

1. S6.B Coordination, and ~~S8~~S6.C Legal Authority are applicable to all Co-Permittees and Secondary Permittees covered under this permit.

2. S6.D is applicable only to the Port of Seattle and the Port of Tacoma.

3. S6.E is applicable only to King County as a Co-Permittee with the City of Seattle for MS4s owned by King County but located within the City of Seattle.

[NOTE TO ECOLOGY: See Seattle's comment to S6.E regarding the scope of King County's responsibilities as a co-permittee.]

4. S6.F is applicable all other Secondary Permittees.

B. Coordination

The SWMP shall include mechanisms to encourage coordinated stormwater-related policies, programs and projects within a watershed and interconnected MS4s. Where relevant and appropriate, the SWMP shall also include coordination among departments of the Secondary Permittee to ~~ensure compliance~~ comply with the terms of this Permit.

b. Minimum Performance Measures:

i. No later than 12 months after the effective date of this permit, establish, in writing, an intra-governmental (internal) coordination agreement(s) or Executive directive(s) to facilitate compliance with the terms of this permit.

ii. No later than 24 months after the effective date of this permit, or within 24 months following the addition of a new Secondary Permittee, establish, in writing, intergovernmental coordination procedures on stormwater management, including

- Coordination mechanisms clarifying roles and responsibilities for the control of pollutants between *physically interconnected* MS3s of the Permittee and any other Permittee covered by a municipal stormwater permit.

[NOTE TO ECOLOGY: Co-Permittees and Secondary Permittees are "encouraged" to coordinate activities, but there are no minimum performance measures. In contrast, Phase I Permittees are required to establish written procedures within 12 months of the effective date of the permit, placing the burden fully on Phase I Permittees. If coordination is required, then Co-Permittees and Secondary Permittees should have the same minimum performance measures (and, therefore, the same regulatory incentives) as Phase I Permittees.]

C. Legal Authority

Tracked Changes and Notes on Main Text of the Permit

[NOTE TO ECOLOGY: See Seattle's tracked changes and comments in S5 on Legal Authority.]

To the extent allowable under state law and federal law, each Secondary Permittee must be able to demonstrate that they can operate pursuant to legal authority which authorizes or enables the Secondary Permittee to control discharges to and from municipal separate storm sewers owned or operated by the Secondary Permittee.

This legal authority, which may be a combination of statutes, ordinances, permits, contracts, orders, interagency agreements, or similar means, shall include the ability to:

1. Control the contribution of pollutants to municipal separate storm sewers owned or operated by the Secondary Permittee from stormwater discharges associated with industrial activity, and control the quality of stormwater discharged from sites of industrial activity into the Secondary Permittee's municipal separate storm sewer;
2. Prohibit illicit discharges to the municipal separate storm sewer owned or operated by the Secondary Permittee;
3. Control the discharge of spills and the dumping or disposal of materials other than stormwater into the municipal separate storm sewer owned or operated by the Secondary Permittee;
4. Control through interagency agreements among co-applicants, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;
5. Require compliance with conditions in ordinances, permits, contracts, or orders; and,
6. Within the limitations of state law, carry out inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with permit conditions, including the prohibition on illicit discharges to the MS4.

D. Stormwater Management Program for the Port of Seattle and Port of Tacoma:

1. Mapping and Documentation. The SWMP shall include an ongoing program for gathering, maintaining, and using adequate information to conduct planning, priority setting, and program evaluation activities for Port-owned properties.

Minimum Performance Measures. The following information will be gathered and retained:

- a. Mapping of known municipal separate storm sewer outfalls, and maps depicting land use for property owned by the Port district, and all other properties served by municipal separate storm sewers known to and owned or operated by the

Tracked Changes and Notes on Main Text of the Permit

Port. The mapping shall be completed within 2 years of receiving coverage under this permit.

- b. Mapping of tributary conveyances, and the associated drainage areas of municipal separate storm sewer outfalls owned or operated by the Port, with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for nonpipe systems. The mapping will be completed within 2 years of receiving coverage under this permit.
- c. To the extent consistent with national security laws and directives, each Port shall make available to Ecology, upon request, GIS data layers generated by the Port depicting outfall locations, land use, tributary conveyances and associated drainage areas of outfalls owned or operated by the Port district. The preferred format of submission will be an electronic format with fully described mapping standards. An example description is provided at <http://www.ecy.wa.gov/services/gis/data/standards.htm> where the preferred standards are described. Notification of updated GIS data layers shall be included in annual reports.
- d. No later than 2 years after receiving coverage under this permit, develop and implement a program to maintain operation and maintenance records for stormwater facilities covered under this permit. The information shall be available for inspection.
- e. Upon request, and to the extent consistent with national security laws and directives, mapping information and operation and maintenance records shall be provided to the City or County in which the Port is located.

- 2. Source Control in Eexisting Developed Areas. The SWMP shall include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the Port district, through the development and implementation of Stormwater Pollution Prevention Plans (SWPPPs). The SWPPP is a documented plan to implement measures to identify, prevent, and control the contamination of discharges of stormwater to surface or ground water. SWPPPS shall be prepared and implemented for all Port-owned lands with potential pollutant-generating sources (see Appendix-38, for definition of pollutant-generating sources) that are not covered under the Industrial Stormwater General Permit, the Boatyard General Permit or an individual NPDES permit that covers stormwater discharges, and that could contribute pollutants to municipal separate storm sewers owned or operated by the Port.

Minimum Performance Measures

- a. SWPPPs must be developed for applicable properties within 24 months of receiving coverage under this permit.

Tracked Changes and Notes on Main Text of the Permit

- b. The SWPPP shall include a facility assessment including a site plan, identification of pollutant sources and description of the drainage system.
 - c. The SWPPP shall include a description of the BMPs determined to be appropriate under the 2005 Stormwater Management Manual for Western Washington (or its approved equivalent) to eliminate or reduce stormwater contamination. Implementation of non-structural BMPs shall begin immediately after the pollution prevention plan is developed. A schedule for implementation of structural BMPs shall be included in the SWPPP. Generic SWPPPs that can be applied at multiple sites may be used to comply with this requirement.
 - d. The Port shall maintain a list of sites for which SWPPPs are required under this permit. At least 15% of the listed sites shall be inspected annually, and 80% of the total number of listed properties will be inspected by 180 days before the expiration date of the permit.
 - e. The SWPPPs shall include policies and procedures to reduce pollutants associated with the application of pesticides, herbicides and fertilizer.
 - f. The SWPPPs shall include measures to prevent, identify and respond to illicit discharges, including illicit connections, spills and improper disposal. Immediately upon becoming aware of a spill into the drainage system owned or operated by the Port, the Port shall notify the City or County it is located in, and notify Ecology.
 - g. The SWPPPs shall include a component related to inspection and maintenance of stormwater facilities and catchbasins that is consistent with the Port's Operation and Maintenance Program, as specified in S6.D.3, below.
3. Operation and Maintenance Program. The SWMP shall include an operation and maintenance program for all stormwater treatment and flow control facilities, and catchbasins to ensure that BMPs continue to function properly.

Minimum Performance Measures:

- a. Each Port must prepare an operation and maintenance manual for all stormwater BMPs that are under the functional control of the Port District that discharge to its MS3s. The deadline for preparing the O&M manual is 2 years after receiving coverage under this permit. A copy of the manual shall be retained in the appropriate Port department. The operation and maintenance manual shall establish facility-specific maintenance standards that are as protective, or more protective than those specified in Chapter 4 of Volume V of the 2005 Stormwater Management Manual for Western Washington.

[NOTE TO ECOLOGY: The term "function control" is unclear and needs to be defined.]

Tracked Changes and Notes on Main Text of the Permit

The facility-specific maintenance standards are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not a measure of the facilities required condition at all times between inspections. Exceeding the maintenance standards between inspections and/or maintenance does not ~~automatically~~ constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action. ~~These Generally speaking, these~~ standards are violated when an inspection identifies a required maintenance action related to facility function, and that action is not performed as required, for example, within 6 months for typical maintenance, within 9 months for re-vegetation, and within 2 years for maintenance that requires capital construction of less than \$25,000.

b. The Port will manage maintenance activities to inspect all stormwater BMPs listed in the O&M manual annually, and take appropriate maintenance action in accordance with the O&M manual. The Port may change the annual inspection to a lesser or greater frequency of inspection, as appropriate to comply with maintenance standards, based on maintenance records of double the length of time of the proposed inspection frequency.

c. The Port shall provide appropriate training for Port maintenance staff.

d. The Port will maintain records of inspections and maintenance activities.

4. Education Program. The SWMP shall include an education program aimed at tenants and Port employees. The goal of the education program is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts.

Minimum Performance Measure:

a. No later than 18 months after receiving coverage under this permit, the Port shall make educational materials available to tenants and Port employees whose job duties could negatively impact stormwater.

5. Monitoring Program. The monitoring requirements for the Port of Seattle and Port of Tacoma are included in Special Condition S8.

6. Construction Site Stormwater Runoff Control

The SWMP shall include a program to reduce pollutants in stormwater runoff to the MS3s owned or operated by the Port District from the Port District's construction activities that meet the thresholds in Appendix 1 of this permit.

Minimum performance measures:

Tracked Changes and Notes on Main Text of the Permit

- a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Port is located that govern construction phase stormwater pollution prevention measures.
- b. Seek coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities, when applicable.
- c. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.

7. Post-Construction Stormwater Management for New Development and Redevelopment

The SWMP shall include a program to address post-construction stormwater runoff to the MS3s owned or operated by the Port District from the Port District's new development and redevelopment projects that meet the thresholds in Appendix 1 of this permit. The program must establish controls to prevent or minimize water quality impacts.

Minimum performance measures:

- a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Port District's MS3 is located that govern post-construction stormwater pollution prevention measures, including proper operation and maintenance of the MS3.
- b. Provide for the post-construction stormwater controls in Appendix 1 to be included on all land-disturbing projects which exceed regulatory thresholds.

8. Illicit Discharge Detection and Elimination

[NOTE TO ECOLOGY: Seattle has not repeated its tracked changes below to avoid confusion, but for the record makes the same comments HERE as in the Illicit Discharge section of S5.C8, above, as applicable.]

Each Port shall:

- a. From the date of permit coverage, comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern non-stormwater discharges.
- b. Develop and adopt appropriate policies prohibiting illicit discharges and illegal dumping no later than one year from the date of permit coverage. Identify possible enforcement mechanisms no later than one year from the date of permit coverage; and, no later than eighteen months from the date of permit coverage, develop and implement an enforcement plan using these mechanisms to ensure

Tracked Changes and Notes on Main Text of the Permit

compliance with illicit discharge policies. These policies shall address, at a minimum: illicit connections; non-stormwater discharges as defined below; and spilling, dumping, or otherwise improperly disposing of: hazardous materials, pet waste, and litter.

i. Non-stormwater discharges covered by another NPDES permit and discharges from emergency fire fighting activities are allowed in the MS4 in accordance with S2 Authorized Discharges.

ii. The policies do not need to prohibit the following categories of non-stormwater discharges:

- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
- Uncontaminated pumped ground water;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water from agricultural sources that is commingled with urban stormwater;
- Springs;
- Water from crawl space pumps;
- Footing drains; and
- Flows from riparian habitats and wetlands.

iii. The policies shall prohibit the following categories of nonstormwater discharges unless the stated conditions following each category are being met:

- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments;
- Discharges from lawn watering and other landscape irrigation runoff. These discharges must be reduced through, at a minimum, public education

Tracked Changes and Notes on Main Text of the Permit

activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.

- Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
- Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.
- Individual residential car washing. Program: Permittee has a program of public education activities (see S5.C.10) emphasizing best management practices such as directing runoff to vegetated areas where it can infiltrate, directing the runoff to the sanitary sewer, or using commercial facilities.

[NOTE TO ECOLOGY: See comment in S5.C.8.]

- iv. The SWMP shall, at a minimum, address each category in iii above in accordance with the conditions stated therein.
 - v. The SWMP must further address any category of discharges in ii or iii above if the discharge is identified as a significant source of pollutants to waters of the State.
- c. Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. Visually inspect at least one third (on average) of all known outfalls each year beginning no later than two years from the date of permit coverage. Develop and implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.
- d. Within two years of receiving coverage under this permit, develop and implement a spill response plan that includes coordination with a qualified spill responder.

Tracked Changes and Notes on Main Text of the Permit

- e. Provide staff training or coordinate with existing training efforts to educate relevant staff on proper best management practices for preventing spills and illicit discharges. All relevant staff must be trained.

E. Stormwater Management Program for King County as a Co-Permittee

King County as a Co-Permittee with the City of Seattle for the Densmore and Lander Metro Drainage Basins, as defined in the Memorandum of Agreement between the City and King County dated September 25, 1995, shall participate in the City of Seattle's Stormwater Management Program in accordance with the Joint Stormwater Management Program element of the Memorandum of Agreement. The Joint Stormwater Management Program shall at a minimum include the following:

1. Stormwater controls for areas of existing development consistent with S5.C.6.
2. A source control program consistent with S5.C.7.
3. An illicit discharge detection and elimination program consistent with S5.C.8.
4. An operation and maintenance program consistent with S5.C.9.
5. A public education program consistent with S5.C.10.

[NOTE TO ECOLOGY: This is the key section for defining basins for which King County is responsible as co-permittee. It needs to be changed. King County remains a co-permittee with the City of Seattle for both Densmore and Lander drainage basins, per the existing agreement and as noted by King County in their Annual Reports to Ecology under the existing NPDES Permit. Additional information regarding this issue is provided in Seattle's Attachment detailing this subject.]

F. Stormwater Management Program for all other Secondary Permittees

All other Secondary Permittees shall develop and implement the following Stormwater Management Program. The term "all other Secondary Permittees" means drainage, diking, flood control, or diking and drainage districts, Ports (other than the Ports of Seattle and Tacoma), public colleges and universities, and any other owners or operators of municipal separate storm sewers located within the geographic boundaries of the municipalities that are listed as Permittees in Special Condition S1.B.

SWMP components

1. Public Education and Outreach

Each Secondary Permittee shall implement the following stormwater education strategies:

- a. Storm drain inlets owned and operated by the Secondary Permittee that are located in maintenance yards, in parking lots, along sidewalks, and at pedestrian

Tracked Changes and Notes on Main Text of the Permit

access points shall be clearly ~~and permanently~~ labeled with the message “Dump no waste” and indicating the point of discharge as a river, lake, bay, or groundwater. No later than three years from the date of permit coverage, at least 50 percent of these inlets must be labeled; and no later than the expiration date of this Permit, all of these inlets shall be labeled. As identified during visual inspection and regular maintenance of storm drain inlets per the requirements of S6.F.3.iv and S6.F.6.a.i below, or as otherwise reported to the Secondary Permittee, any inlet having a label that is no longer clearly visible and/or easily readable must be re-labeled within 90 days.

[NOTE TO ECOLOGY: Deleting the words “and permanently” above is consistent with the last sentence of the requirement.]

b. Each year beginning no later than three years from the date of permit coverage, Public Ports, Colleges and Universities shall distribute educational information to tenants and residents on the impact of stormwater discharges on receiving waters, and steps that can be taken to reduce pollutants in stormwater runoff. Different combinations of topics shall be addressed each year, and, before the expiration date of this Permit, tenants and residents shall receive educational information about the following topics, where relevant:

- i. How stormwater runoff affects local waterbodies;
- ii. Proper use and application of pesticides and fertilizers;
- iii. Benefits of using well-adapted vegetation;
- iv. Alternative equipment washing practices including cars and trucks that minimize pollutants in stormwater;
- v. Benefits of proper vehicle maintenance and alternative transportation choices; proper handling and disposal of wastes, including the location of hazardous waste collection facilities in the area;
- vi. Hazards associated with illicit connections; and
- vii. Benefits of litter control and proper disposal of pet waste.

Compliance with this requirement can be achieved through participation in the local jurisdiction’s public education and outreach programs.

2. Public Involvement and Participation

180 days before the expiration date of this Permit, each Secondary Permittee shall:

- a. Publish a public notice in the local newspaper and solicit public review of their SWMP.

Tracked Changes and Notes on Main Text of the Permit

- 1 b. Make the latest updated version of the SWMP available to the public. If the
2 Secondary Permittee maintains a website, the SWMP shall be posted on the
3 Secondary Permittee's website.

4 3. Illicit Discharge Detection and Elimination

5 **[NOTE TO ECOLOGY: Seattle has not repeated its tracked changes below to avoid**
6 **confusion, but for the record makes the same comments here as in the Illicit Discharge**
7 **section of S5.C8, above, as applicable.]**

8 Each Secondary Permittee shall:

- 9 a. From the date of permit coverage, comply with all relevant ordinances, rules,
10 and regulations of the local jurisdiction(s) in which the Secondary Permittee is
11 located that govern non-stormwater discharges.
- 12 b. Develop and adopt appropriate policies prohibiting illicit discharges and illegal
13 dumping no later than one year from the date of permit coverage. Identify
14 possible enforcement mechanisms no later than one year from the date of permit
15 coverage; and, no later than eighteen months from the date of permit coverage,
16 develop and implement an enforcement plan using these mechanisms to ensure
17 compliance with illicit discharge policies. These policies shall address, at a
18 minimum: illicit connections; non-stormwater discharges as defined below; and
19 spilling, dumping, or otherwise improperly disposing of: hazardous materials,
20 pet waste, and litter.
- 21 i. Non-stormwater discharges covered by another NPDES permit and
22 discharges from emergency fire fighting activities are allowed in the MS4 in
23 accordance with S2 Authorized Discharges.
- 24 ii. The policies do not need to prohibit the following categories of non-
25 stormwater discharges:
- 26 • Diverted stream flows;
 - 27 • Rising ground waters;
 - 28 • Uncontaminated ground water infiltration (as defined at 40 CFR
29 35.2005(20));
 - 30 • Uncontaminated pumped ground water;
 - 31 • Foundation drains;
 - 32 • Air conditioning condensation;
 - 33 • Irrigation water from agricultural sources that is commingled with urban
34 stormwater;
 - 35 • Springs;

Tracked Changes and Notes on Main Text of the Permit

- Water from crawl space pumps;
 - Footing drains; and
 - Flows from riparian habitats and wetlands.
- iii. The policies shall prohibit the following categories of non-stormwater discharges unless the stated conditions are met:
- Discharges from potable water sources, including water line flushing, hyperchlorinated water line flushing, fire hydrant system flushing, and pipeline hydrostatic test water. Planned discharges shall be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments;
 - Discharges from lawn watering and other landscape irrigation runoff. These discharges must be reduced through, at a minimum, public education activities and water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction.
 - Dechlorinated swimming pool discharges. The discharges shall be dechlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments. Swimming pool cleaning wastewater and filter backwash shall not be discharged to the MS4.
 - Street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents. The Secondary Permittee shall reduce these discharges through, at a minimum, public education activities and/or water conservation efforts conducted by the Secondary Permittee and/or the local jurisdiction. To avoid washing pollutants into the MS4, the Secondary Permittee shall minimize the amount of street wash and dust control water used. At active construction sites, street sweeping must be performed prior to washing the street.
- iv. The Secondary Permittee's SWMP shall, at a minimum, address each category in iii above in accordance with the conditions stated therein.
- v. The SWMP must further address any category of discharges in ii or iii above if the discharge is identified as a significant source of pollutants to waters of the State.
- c. 180 days before the expiration date of this Permit, develop a storm sewer system map showing the locations of all known storm drain outfalls, labeling the receiving waters, and delineating the areas contributing runoff to each outfall. Make the map (or completed portions of the map) available on request

Tracked Changes and Notes on Main Text of the Permit

to the Department and/or to other Permittees or Secondary Permittees. The preferred, but not required, format of submission will be an electronic format with fully described mapping standards. An example description is provided at <http://www.ecy.wa.gov/services/gis/data/standards.htm>.

- d. Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. Visually inspect at least one third (on average) of all known outfalls each year beginning no later than two years from the date of permit coverage. Develop and implement procedures to identify and remove any illicit discharges. Keep records of inspections and follow-up activities.
- e. 180 days before the expiration date of this Permit, develop and implement a spill response plan that includes coordination with a qualified spill responder.
- f. Provide staff training or coordinate with existing training efforts to educate relevant staff on proper best management practices for preventing spills and illicit discharges. All relevant staff must be trained.

4. Construction Site Stormwater Runoff Control

From the date of permit coverage, each Secondary Permittee shall:

- a. Comply with all relevant ordinances, rules, and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern construction phase stormwater pollution prevention measures.
- b. For all construction projects under the control of the Secondary Permittee which require an NPDES permits under 40 CFR 122.26 and where required by departments General NPDES Permit for Stormwater Discharges Associated with Construction Activities the Secondary Permittees shall obtain coverage under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities or an alternative individual NPDES permit prior to discharging.
- c. To the extent allowable under local, state and federal law, coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s), including implementation of the Minimum Technical Requirements for Construction Stormwater Pollution Prevention contained in Appendix 1, Minimum Requirement #2, or requirements of the local jurisdiction determine by Ecology to be equivalent to Appendix 1.
- d. Provide training or coordinate with existing training efforts to educate relevant staff in erosion and sediment control BMPs and requirements, or hire trained contractors to perform the work.

Tracked Changes and Notes on Main Text of the Permit

- e. Coordinate as requested with the Department or the local jurisdiction to provide access for inspection of construction sites or other land disturbances that are under the control of the Secondary Permittee during the active grading and/or construction period.

5. Post-Construction Stormwater Management for New Development and Redevelopment

From the date of permit coverage, each Secondary Permittee shall:

- a. Comply with all relevant ordinances, rules and regulations of the local jurisdiction(s) in which the Secondary Permittee is located that govern post-construction stormwater pollution prevention measures.
- b. To the extent allowable under local, state and federal law, coordinate with the local jurisdiction regarding projects owned and operated by other entities which discharge into the Secondary Permittee's MS4, to assist the local jurisdiction with achieving compliance with all relevant ordinances, rules, and regulations of the local jurisdiction(s), including implementation of the Minimum Technical Requirements in Appendix 1, or requirements of the local jurisdiction determined by Ecology to be equivalent to Appendix 1.
- c. No later than ~~one year~~ two years from the date of permit coverage, and to the extent allowable under local, state and federal law, new projects owned or operated by the Secondary Permittee, must comply with the Minimum Technical Requirements in Appendix 1 for post construction stormwater controls, or requirements of the local jurisdiction determined by Ecology to be equivalent to Appendix 1.

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Each Secondary Permittee shall:

- a. No later than three years from the date of permit coverage, develop and implement a municipal operation and maintenance (O&M) plan to minimize stormwater pollution from activities conducted by the Secondary Permittee. The O&M Plan must include appropriate pollution prevention and good housekeeping procedures for all of the following operations, activities, and/or types of facilities that are present within the Secondary Permittee's boundaries. Record keeping is required to track performance of operational source control activities; performance of scheduled inspections and maintenance activities; and response to spills and other potential pollution incidents not addressed in S6.F.3
- i. Stormwater collection and conveyance system, including catch basins, stormwater sewer pipes, open channels, culverts, structural stormwater controls, and structural runoff treatment and/or flow control facilities. The O&M Plan must address, but is not limited to: scheduled inspections and maintenance activities, including cleaning and proper disposal of waste

Tracked Changes and Notes on Main Text of the Permit

removed from the system. Secondary Permittees shall properly maintain stormwater collection and conveyance systems owned or operated by the Secondary Permittee and regularly inspect and maintain all structural post-construction stormwater BMPs to ensure facility function. The Secondary Permittee shall establish maintenance standards that are as protective or more protective of facility function as those specified in Chapter 4 Volume V of the 2005 Stormwater Management Manual for Western Washington.

Secondary Permittees shall conduct spot checks of stormwater treatment and flow control facilities following a 24 hour storm event with a 10-year or greater recurrence interval.

- ii. Roads, highways, and parking lots. The O&M Plan must address, but is not limited to: deicing, anti-icing, and snow removal practices; snow disposal areas; material (e.g. salt, sand, or other chemical) storage areas; all-season BMPs to reduce road and parking lot debris and other pollutants from entering the MS4. Secondary Permittees shall store all de-icing and anti-icing materials in a permanent walled and roof structure.
- iii. Vehicle fleets. The O&M Plan must address, but is not limited to: storage, washing, and maintenance of municipal vehicle fleets; and fueling facilities. Secondary Permittees shall conduct all vehicle and equipment washing and maintenance in a self-contained covered building or in designated wash and/or maintenance areas.
- iv. External building maintenance. The O&M Plan must address, building exterior cleaning and maintenance including cleaning, washing, painting and other maintenance activities.
- v. Parks and open space. The O&M Plan must address, but is not limited to: proper application of fertilizer, pesticides, and herbicides; sediment and erosion control; BMPs for landscape maintenance and vegetation disposal; and trash management.
- vi. Material storage areas, heavy equipment storage areas, and maintenance areas. Secondary Permittees shall develop and implement a Stormwater Pollution Prevention Plan to protect water quality at each of these facilities owned or operated by the Secondary Permittee and not covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities or under another NPDES permit that covers stormwater discharges associated with the activity.
- vii. Other facilities that would reasonably be expected to discharge contaminated runoff. The O&M Plan must address proper stormwater pollution prevention practices for each facility.

Tracked Changes and Notes on Main Text of the Permit

viii. The O&M Plan shall include sufficient documentation and records as necessary to demonstrate compliance with the O&M Plan requirements in S6.F.6.a.i through vii above.

b. From the date of coverage under this Permit, also have permit coverage for all facilities owned, operated or maintained by the Secondary Permittee that are required to be covered under the General NPDES Permit for Stormwater Discharges Associated with Industrial Activities.

c. Train all employees whose construction, operations, or maintenance job functions may impact stormwater quality. The training shall address:

i. The importance of protecting water quality,

ii. The requirements of this Permit,

iii. Operation and maintenance requirements,

iv. Inspection procedures,

v. Ways to perform their job activities to prevent or minimize impacts to water quality, and

vi. Procedures for reporting water quality concerns, including potential illicit discharges.

S7. TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION ~~TOTAL MAXIMUM DAILY LOAD ALLOCATIONS~~

The following requirements apply if an applicable Total Maximum Daily Load (TMDL) is approved by EPA for stormwater discharges from MS4s owned or operated by the Permittee. ~~Applicable TMDLs or applicable TMDL requirements are listed in Appendix 2 and are TMDLs which have been approved by EPA on or before the issuance date of this permit, or TMDLs which have been approved by EPA prior to the date that the Permittees application is received by Ecology. All Permittees must be in compliance with applicable the following permit requirements for actions and activities related to implementing TMDLs requirements.~~

[NOTE TO ECOLOGY: Seattle is generally in favor of the TMDL approach proposed by Ecology.]

(1) Seattle understands that Ecology's intent above and in S7.A is to incorporate actions and activities contained in Appendix 2 into the permit, for the Permittees and MS3s to which they apply. Seattle supports requiring BMPs in MS4 permits in order to implement TMDLs for municipal stormwater, which is consistent with federal guidance. (2) Consistent with the use of BMPs for stormwater, the phrase "actions or activities" is taken from Ecology's language at S5.A, regarding TMDLs and SWMPs. (3) The last sentence above is changed because Seattle understands that permittees are bound to comply with NPDES permit requirements, not

Tracked Changes and Notes on Main Text of the Permit

statements in TMDLs, which are planning tools. The annual reporting status sentences below in A and B are changed for the same reason.]

A. For applicable TMDLs listed in Appendix 2, affected Permittees shall comply with the specific requirements of actions or activities identified in Appendix 2 for discharges of pollutants from the Permittee's MS3s in addition to the requirements of this permit. The status of the TMDL implementation compliance with this provision must be included as part of the annual report submitted to Ecology for this Permit.

1. Where monitoring is required in Appendix 2, the permittee shall submit a Quality Assurance Project Plan (QAPP) to Ecology for review and approval according to the timelines established in S8, or, if available, conduct the monitoring according to a QAPP developed by Ecology.

B. For applicable TMDLs not listed in Appendix 2 that are approved by EPA for discharges of pollutants from the Permittee's MS3s, compliance with this permit shall constitute the required actions and activities compliance with those TMDLs. Each Permittee shall keep records of all actions required by this permit that are relevant to applicable the water body segment that is the subject of such a TMDLs within their Permittee's jurisdiction. The status of compliance with this provision the TMDL implementation must be included as part of the annual report submitted to Ecology for this permit.

C. For TMDLs that are approved by EPA after this permit is issued, the Department Ecology may establish additional TMDL-related permit requirements through future permit modification or when this permit is reissued. Permittees are encouraged to participate in development of TMDLs within their jurisdiction and to begin implementation implementing actions independent of specific permit conditions. The Department may modify this permit to incorporate requirements from TMDLs completed after the issuance of this permit if the Department determines implementation of actions, monitoring or reporting necessary to demonstrate reasonable further progress toward achieving TMDL waste load allocations, and other targets, are not occurring and must be implemented during the term of this permit.

[NOTE TO ECOLOGY: The last sentence seemed redundant with the first and has been removed.]

S8. MONITORING

[NOTE TO ECOLOGY: Seattle's comments justifying the changes in S8 are contained in Attachment 6.]

Tracked Changes and Notes on Main Text of the Permit

The Permittees listed in S1.B, Port of Seattle and Port of Tacoma shall develop and implement a comprehensive long-term monitoring program. The monitoring program shall include ~~three~~two components:

~~Stormwater Monitoring,~~

Stormwater Management Program effectiveness monitoring

Stormwater Treatment and Hydrologic Management BMP evaluation monitoring.

The results of the monitoring program shall be used to support the adaptive management process and lead to refinements of the Stormwater Management Program. The monitoring program must include Quality Assurance Project Plans (QAPPs) for each monitoring objective, written in accordance with Ecology's QAPP guidelines at <http://www.ecy.wa.gov/biblio/0403030.html>. The monitoring program must be developed by qualified staff or contractors that have experience in applying Ecology's or EPA's QAPP Guidelines.

Secondary Permittees other than Ports have no requirement for monitoring under this section during this permit term, however, in accordance with S6.F.3.c, they are required to provide information, maps and access for sampling efforts, as necessary. Secondary Permittees are encouraged to participate in the monitoring program

[NOTE TO ECOLOGY: Seattle recommends that Section S8.A Stormwater Monitoring be removed from the permit since it is unlikely to meet the primary objective of the NPDES Monitoring Program, to provide a feedback loop for adaptive management of the permittee's stormwater management programs and the municipal stormwater permit. However, if Ecology chooses to pursue this program, Seattle has provided tracked changes comments to make the required monitoring technically feasible and reducing the impact of the required monitoring on other stormwater management programs by reducing the level of effort.]

A. Stormwater Monitoring

1. Stormwater monitoring site selection

- a. Adequate sites will have the tributary conveyance system and drainage area mapped, and be suitable for permanent installation and operation of flow-weighted composite sampling equipment.
- b. Counties shall monitor ~~one outfall or conveyance representing each of the following land uses~~at two outfalls or conveyances. Each monitoring station will be representative of one of the following land uses. Permittees may establish monitoring stations at two sites having the same land use in a paired watershed approach:

Tracked Changes and Notes on Main Text of the Permit

- i. Commercial,
 - ii. Low density residential, ~~and~~
 - iii. High density residential, and.
 - iv. Roadway.
- c. Cities shall monitor at two outfalls or conveyances. Each monitoring station will be representative of one of the following land uses. Permittees may establish monitoring stations at two sites having the same land use in a paired watershed approach one outfall or conveyance representing each of the following land uses:
- i. Commercial,
 - ii. High density residential, ~~and~~
 - iii. Industrial, and.
 - iv. Roadway.
- d. The Ports of Seattle and Tacoma shall each monitor one outfall or conveyance.
2. Stormwater monitoring frequency and type of sampling shall be as follows:
- a. Each stormwater monitoring site shall be sampled according to the following frequency:
 - i. 75% of the qualifying storms during the wet season, from October 1 through April 30, up to a maximum of 8 storm events per year. A wet season storm event is defined as follows:
 - Rainfall volume 0.10" minimum
No fixed maximum
 - Rainfall duration No fixed minimum or maximum
 - Antecedent dry period less than 0.02" rain fall in the previous 24 hours
 - Inter-event dry period 6 hours
 - ~~i.~~ ii. 75% of the qualifying storms during the dry season, from May 1 through September 30, up to a maximum of 2 storm events per year. A dry season storm up to a maximum of 15 storm events per year, with sampling distributed throughout the year, reflecting the 80%/20% distribution of rainfall between the wet and dry seasons as follows event is defined as follows:
 - ~~(1) 75% of the qualifying storms during the wet season, from October 1 through April 30. A wet season storm event is defined as follows:~~

Tracked Changes and Notes on Main Text of the Permit

1 •Rainfall volume———0.10” minimum

2 No fixed maximum

3 •Rainfall duration No fixed minimum or maximum

4 •Antecedent dry period——less than 0.02” rain fall in the previous 24
5 hours

6 •Inter event dry period——6 hours

7 (2) ~~75% of the qualifying storms during the dry season, from May 1~~
8 ~~through September 30. A dry season storm event is defined as follows:~~

9 • Rainfall volume 0.10” minimum

10 No fixed maximum

11 • Rainfall duration No fixed minimum or maximum

12 • Antecedent dry period less than 0.02” in the previous 72 hours

13 • Inter-event dry period 6 hours

14 b. Each sampled storm event shall be sampled using flow-weighted composite
15 storm sampling. As a guideline, at least 75% of the total storm runoff event
16 volume should be sampled if the storm duration is less than 24 hours. If the
17 storm is longer than 24 hours, 75% of the total storm runoff event volume of the
18 first 24 hours should b sampled. Samples should be analyzed, for the full
19 duration of the storm event, for the constituents/parameters listed below.
20 Chemicals that are below detection limits after two years of data may be
21 dropped from the analysis.

22 i. Flow, Hydrograph data including antecedent dry period, rainfall and runoff,

23 ii. TSS and turbidity,

24 iii. Conductivity ~~if tidally influenced,~~

25 iv. Chloride,

26 v. Metals including, at a minimum, total and dissolved copper, zinc, cadmium,
27 and lead; and mercury sampling in commercial and industrial land use areas,

28 vi. Hardness,

29 vii. PAHs associated with vehicles, roads and parking lots; phthalates

30 viii. Pesticides including:

31 • Herbicides: 2,4-D, MCPP, Dichlobenil, Prometon, Triclopyr,

32 • Insecticides: Diazinon, Malathion, Chlorpyrifos

33 • Fungicides: Pentachlorophenol

Tracked Changes and Notes on Main Text of the Permit

- ix. Nutrients including total nitrogen, phosphorus, nitrate/nitrite and orthophosphate, and
- x. Biochemical oxygen demand (BOD), ~~and~~
- c. Toxicity testing of a “seasonal first-flush” storm event defined as an event in August or September, with at least a 1 week antecedent dry period. Required test is the Daphnid acute test, Ceriodaphnia dubia or Daphnia pulex (48-hour static test, method: EPA-821-R-02-012).
- d. Each storm event shall be sampled using grab samples for the following constituents/parameters:
- i. Total Petroleum Hydrocarbons (TPH) using NWTPH-Gx and NWTPH-Dx. (sample must be collected early in the storm event and skimmed from the surface), and
- ii. Fecal coliform bacteria.
- ~~e. Sediments will be collected and analyzed for percent solids, total organic carbon, metals, PAHs, phthalates, phenolics and PCBs at all sites in the system proposed for monitoring. Chemicals that are below detection limits after two years of data may be dropped from the analysis. A minimum of 1 independent sample, up to a maximum of 3 independent samples per year should be collected. Use of in-line sediment traps or similar collection system is preferred. Sampling of sediment deposits is an alternative where approved by the department.~~
3. The objective of the stormwater monitoring is to measure and track long term trends in annual and seasonal pollutant loading of stormwater discharges. A QAPP is required for the stormwater monitoring program. For each stormwater monitoring site, calculate the Event Mean Concentrations (EMCs), total annual pollutant load and the seasonal pollutant load for the wet and dry seasons. The loadings shall be expressed as total pounds and as pounds per acre, and must take into account potential pollutant load from base flow.
- B. Stormwater Management Program Effectiveness Monitoring
- ~~1. Each permittee and the Ports of Seattle and Tacoma shall conduct monitoring designed to determine the effectiveness of the permittee’s SWMP at controlling a stormwater related problem directly addressable by actions in the SWMP. Each Permittee and the Ports of Seattle and Tacoma shall develop and implement a monitoring program designed to answer one of each type of the following questions, at minimum 2 questions must be addressed:~~
- a. ~~The effectiveness of a targeted action (or narrow suite of actions), and~~

Tracked Changes and Notes on Main Text of the Permit

~~b. a. The effectiveness of achieving a targeted environmental outcome. two~~
monitoring programs. One monitoring will address the effectiveness of a
targeted action (or narrow suite of actions), and one monitoring program will
address the effectiveness of achieving a targeted environmental outcome.

[NOTE TO ECOLOGY: Seattle recommends deleting Section S8.B.2. However, if Ecology chooses to specify type of required monitoring, Seattle recommends incorporating the tracked changes presented for this section.]

2. The monitoring ~~shall at a minimum~~ may include either stormwater ~~or~~ receiving water, or sediment monitoring of physical, chemical and/or biological characteristics. The monitoring may also include data collection and analysis of other programmatic measures of effectiveness such as surveys and poll~~evaluation of regulatory processes, programmatic actions or other similar evaluations.~~

3. For each of the 2 questions selected for monitoring, the permittee must develop a monitoring program containing the following elements:
- Statement of the problem selected and explanation of why the problem is significant to the permittee, and if the problem is significant to other stormwater managers;
 - Specific hypotheses about the problem or management actions that will be tested by the monitoring problem;
 - Specific parameters of attributes to be measured;
 - A QAPP written in accordance with Ecology's QAPP guidelines
 - Expected modifications to management actions depending on the outcome of hypotheses testing.

C. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring

- Each Permittee listed in S1.B and the Ports of Seattle and Tacoma shall conduct full scale field monitoring to evaluate the effectiveness and operation and maintenance requirements of stormwater treatment and hydrologic management BMPs applied in their jurisdiction. A QAPP is required for each BMP and flow reduction strategy being monitored.
- Each Permittee listed in S1.B shall monitor at least 2 treatment BMPs, at no less than 2 sites per BMP. The Ports of Seattle and Tacoma shall each monitor at least 1 treatment BMP, at 2 sites. BMPs shall be selected from the following list:
 - BMP treatment types:
 - Basic Treatment

Tracked Changes and Notes on Main Text of the Permit

(1) Biofiltration swale

(2) Filter strip

(3) Basic wetpond

(4) Treatment wetland

(5) Sand filter

ii. Metals/Phosphorus Treatment

(1) Amended sand filter

(2) Two facility treatment train

(3) Compost amended filter strips

(4) Bioretention

(5) Large wetpond

iii. Oil Control

(1) Linear sand filter

(2) Catch basin insert

b. BMPs shall be designed in accordance with the 2005 Stormwater Management Manual for Western Washington unless Ecology approves of an alternate design in the QAPP review. Instead of the BMPs listed in S8.C.2.a, a Permittee may select to monitor the effectiveness of water quality low impact development (LID) BMPs listed in the Low Impact Development Technical Manual for Puget Sound such as bioretention areas, amending construction site soils, and permeable paving. Permittees may also petition Ecology to monitor a BMP that is not on the above list that they wish to evaluate as a potential option for common use in their jurisdiction.

c. Permittees shall prepare QAPPs consistent with Ecology (guidelines available at: <http://www.ecy.wa.gov/biblio/0403030.html>) and shall use appropriate sections of “Guidance for Evaluating Emerging Stormwater Treatment Technologies” (Publication Number 02-10-037) - or its updated version if published before the issuance date of this permit – including the “Technology Assessment Protocol-Ecology” (TAPE) for preparing, implementing, and reporting on the results of the BMP evaluation program. The statistical goal is to determine mean effluent concentrations and mean percent removals for each BMP type with 95% confidence and 80% power. However, a maximum of 35 influent and effluent sample pairs will suffice.

Permittees shall use USEPA publication number 821-B-02-001 , “Urban Stormwater BMP Performance Monitoring,” as additional guidance for

Tracked Changes and Notes on Main Text of the Permit

preparing the BMP evaluation monitoring, and shall collect information pertinent to fulfilling the “National Stormwater BMP Data Base Requirements” in section 3.4.3. of that document.

d. Parameters to be monitored in whole water at each test site for Basic, Enhanced, or Phosphorus treatment BMPs include:

- i. Total suspended solids
- ii. Particle size distribution
- iii. pH
- iv. Total and ortho-phosphorus
- v. Hardness
- vi. Total and dissolved copper and zinc

e. Parameters to be monitored in whole water at test sites for Oil Control BMP's include:

- i. Total suspended solids
- ii. Particle size distribution
- iii. pH
- iv. NWTPH-Dx and -Gx
- v. Visible sheen

f. Parameters to be monitored in accumulated sediment at each test site for Basic, Enhanced, Phosphorus treatment, or Oil Control BMPs include:

- i. Percent total solids
- ii. Grain size
- iii. Total volatile solids
- iv. NWTPH-Dx
- v. Total cadmium, copper, lead, and zinc
- vi. Total phosphorus

3. Each Permittee listed in S1.B. shall monitor the effectiveness of 1 flow reduction strategy that is in use or planned for installation in their jurisdiction.

Monitoring of a flow reduction strategy shall include continuous rainfall and surface runoff monitoring. Flow reduction strategies shall be monitored through either a paired site study or against a predicted outcome.

D. Monitoring Program Development

Tracked Changes and Notes on Main Text of the Permit

1. The Permittees listed in S1.B and the Ports of Seattle and Tacoma may choose to develop 1, 2 or all of the components of the monitoring program, conduct the monitoring, and report results through an integrated, long-term, water quality monitoring program in collaboration with other municipal stormwater Permittees; or they may independently develop 1, 2 or all of the components of the monitoring program, conduct the monitoring, and report results.

A collaborative monitoring program may be developed by a third party (or parties) that is not a Permittee, provided that the permittee complies with the provisions of Special Condition S3.B (relying on another entity to meet permit requirements).

2. All QAPPs must be submitted to Ecology, for ~~review~~approval, in accordance with the deadlines below. ~~All QAPPs for S8.A, Stormwater Monitoring, and S8.C, Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program must be reviewed and approved by Ecology prior to monitoring.~~

E. Monitoring Program Deadline

1. The deadlines for collaborative, integrated monitoring program are as follows:
- Permittees that intend to meet all or part of the monitoring requirements through a collaborative process must submit a statement to Ecology explaining their commitment to the collaborative process no later than 1 year after the effective date of this permit
 - The summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 2 years after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.
 - ~~Approved or final QAPPs must be completed no later than 2.5 years after the effective date of this permit~~Ecology will review QAPPs and provide a written response to the Permittee. If Ecology requests additional information or changes to a QAPP, the Permittee will revise the QAPP within 2 months of receiving written comments from Ecology and resubmit the QAPP for approval. Ecology will review resubmitted QAPPs and provide a written response to the Permittee.
 - Full implementation of the stormwater and receiving water monitoring program shall begin ~~no later than 3 years after the effective date of this permit~~within six months after the QAPP is approved or within 36 months after the effective date of the permit, whichever is later. The third party or parties selected to develop the monitoring plan may continue to be utilized to collect and analyze the data and to write the subsequent reports required under this permit.
 - Data collection and analysis for S8.C. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program ~~must be complete and~~

Tracked Changes and Notes on Main Text of the Permit

~~submitted to Ecology no later than 4 years from the effective date of this permit that have been completed during the permit term must be submitted to Ecology no later than the fifth-year Monitoring Report. The fifth-year Monitoring Report will also describe Stormwater Treatment and Hydrologic Management BMP Evaluation Programs that are still in progress as of the end of the reporting period.~~

2. The deadlines for an independently developed monitoring program are as follows:

- a. A summary description of the monitoring program and QAPPs, as required, shall be submitted to Ecology no later than 1 year after the effective date of this permit. The monitoring program shall be submitted in both paper and electronic form.
- b. Ecology will review QAPPs and provide a written response to the Permittee. If Ecology requests additional information or changes to a QAPP, the Permittee will revise the QAPP within 2 months of receiving written comments from Ecology and resubmit the QAPP for approval. Ecology will review resubmitted QAPPs and provide a written response to the Permittee. Approved or final QAPPs must be completed no later than 1.5 years after the effective date of this permit.
- c. Full implementation of the stormwater and receiving water monitoring program shall begin within six months after the QAPP is approved or within 24 months after the effective date of the permit, whichever is later.~~Full implementation of the stormwater and receiving water monitoring program shall begin no later than 2 years after the effective date of this permit.~~
- d. Data collection and analysis for S8.C. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring Program that have been completed during the permit term must be submitted to Ecology no later than the fifth-year Monitoring Report. The fifth-year Monitoring Report will also describe Stormwater Treatment and Hydrologic Management BMP Evaluation Programs that are still in progress as of the end of the reporting period.~~must be complete and submitted to Ecology no later than 4 years from the effective date of this permit.~~

F. Monitoring Program Reporting Requirements

1. The stormwater monitoring report shall be submitted by ~~December 31~~May 1 each year, beginning in 2009 for independent monitoring, and 2010 for collaborative monitoring. Each report shall include all monitoring data collected during the preceding period from ~~October 1~~January 1 through ~~September 30~~December 31. Each report shall also integrate data from earlier years into the analysis of results, as appropriate. Permittees that choose to participate in an integrated water quality

Tracked Changes and Notes on Main Text of the Permit

monitoring program shall submit a single integrated monitoring report. Reports shall be submitted in both paper and electronic form and shall include:

~~a. Stormwater Monitoring Reporting~~

- ~~i. A summary including the location, land use, drainage area size, and hydrology for each site,~~
- ~~ii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,~~
- ~~iii. The annual pollutant load for each site expressed in total pounds, and pounds/acre, and~~
- ~~iv. The wet and dry season pollutant loads, expressed in total pounds, and pounds/acre.~~

b. Stormwater Management Program Effectiveness Monitoring Reporting

- i. A summary of the purpose, design, and methods of the monitoring program,
- ii. The status of implementing the monitoring program,
- iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
- iv. An analysis of the results of each part of the monitoring program, including any identified water quality problems or improvements or other trends in stormwater or receiving water quality, and
- v. Recommended future actions based on the findings.

c. Stormwater Treatment and Hydrologic Management Best Management Practice (BMP) Evaluation Monitoring Reporting

- i. A summary including the BMP type location, land use, drainage area size, and hydrology for each site.
- ii. The status of implementing the monitoring program,
- iii. A comprehensive data and QA/QC report for each part of the monitoring program, with an explanation and discussion of the results of each monitoring project,
- iv. Performance data or flow reduction performance. Performance data for treatment BMPs shall be reported consistent with:
 - (1) The guidelines in appropriate sections of “Guidance for Evaluating Emerging Stormwater Treatment Technologies” (Publication Number 02-10-037) - or its updated version if published before the issuance date of

Tracked Changes and Notes on Main Text of the Permit

this permit – including the “Technology Assessment Protocol-Ecology (TAPE), and

- (2) USEPA publication number 821-B-02-00, “Urban Stormwater BMP Performance Monitoring,” including information pertinent to fulfilling the “National Stormwater BMP Data Base Requirements” in section 3.4.3. of that document.

[NOTE TO ECOLOGY: Seattle recommends moving Section S8.F.1.d to Section S9.B.]

~~d. Monitoring Cost Reporting. Report the cost of development and implementation of the monitoring program including the preparation of monitoring plans, sample collection, sampling equipment, laboratory analysis, data analysis and reporting.~~

2. If the Permittee monitors any pollutant more frequently at monitoring station associated with the monitoring programs described in Section S8.A. (if this requirement is not removed), S8.B., and S8.C~~than required by the required monitoring program~~, then the results of this monitoring shall be included in the report. ~~If the Permittee conducts any other stormwater monitoring in addition to that required in the required monitoring program, then it shall provide a description of the additional monitoring in the report.~~

S9. REPORTING REQUIREMENTS

- A. Each Permittee, co-Permittee and secondary Permittee shall submit, no later than ~~March 31~~May 1 of each year beginning in the year ~~2008~~ 2007, an annual report. The reporting period for each annual report shall be the previous calendar year.

[NOTE TO ECOLOGY: The May 1 date allows for better collection of financial and programmatic data from the previous year and coordinates with the Monitoring Report deadline recommended by Seattle.]

- B. The annual report shall include the following information in the form provided in Appendices 3 or 4, to the best of Permittee’s knowledge and belief:

1. Status of compliance with the conditions of this permit, including the status of implementing the components of the stormwater management program, and the implementation schedule. If permit deadlines are not met, Permittees, co-Permittees and secondary Permittees shall report the reasons why the requirement was not met and how the requirements will be met in the future, including projected implementation dates. A comparison of program implementation results to performance standards established in this permit shall be included for each program area.

Tracked Changes and Notes on Main Text of the Permit

2. Notification of any recent or proposed annexations or incorporations resulting in an increase or decrease in permit coverage area, and expected implications for the stormwater management program
3. Expenditures for the reporting period, with a breakdown for the components of the stormwater management program.
4. A summary describing compliance activities, including the nature and number of official enforcement actions, inspections, and types of public education activities; and
5. ~~Identification of known water quality improvements or degradation.~~

[NOTE TO ECOLOGY: Meeting the intent behind Requirement S9.B.5 is problematic. Given the significant variability in the quality of municipal stormwater discharges and the indeterminate timeframe in 5 above, Seattle recommends that the requirement be deleted or that Ecology provided additional guidance on what constitutes a “known” water quality improvement or degradation.]

C. Report Format

Each Permittee, co-Permittee or secondary Permittee shall use the attached reporting forms, in Appendices 3 and 4. Each Permittee shall complete the applicable form in its entirety. Two copies of the annual report shall be submitted to Ecology. In addition, an electronic copy of the report, in pdf format, shall be submitted to Ecology.

D. Report Certification

Ecology shall review and certify in writing within 60 days of receipt that the report submitted by the permittee satisfies the requirements of this permit.

[NOTE TO ECOLOGY: Seattle believes certifying reports is part of Ecology’s responsibility as the regulatory agency overseeing the NPDES Permit program. It is also consistent with the Fact Sheet (Page 56-57) where Ecology states that the information contained in the Annual Reports will be used to evaluate compliance with permit requirements.]

Tracked Changes and Notes on Main Text of the Permit

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control to achieve compliance with the terms and conditions of this permit.

G3. NOTIFICATION OF SPILL

If a Permittee has knowledge of a spill into ~~its~~^a municipal storm sewer which could constitute a threat to human health, welfare, or the environment, the Permittee shall notify the Ecology regional office and other appropriate spill response authorities immediately but in no case later than within 24 hours of obtaining that knowledge. Spills into a Permittee's municipal storm sewer about which the Permittee has knowledge and which might cause bacterial contamination of shellfish, such as might result from broken sewer lines, shall be reported immediately to the Department of Ecology and the Department of Health, Shellfish Program, if Permittee has knowledge of such spill. The Department of Ecology's Regional Office 24-hr. number is 425 649-7000 for NWRO and 360 407-6300 for SWRO and the Department of Health's Shellfish 24-hr. number is 360-236-3330.

[NOTE TO ECOLOGY: Changes are needed to clarify that notification is for spills into a Permittee's own MS3 when the Permittee has knowledge of the spill.]

G4. BYPASS PROHIBITED

The intentional *bypass* of stormwater from all or any portion of a stormwater treatment BMP whenever the design capacity of the treatment BMP is not exceeded, is prohibited unless the following conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act (CWA); and
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated stormwater, or maintenance during normal dry periods.

Tracked Changes and Notes on Main Text of the Permit

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss.

G5. RIGHT OF ENTRY

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law at reasonable times:

- A. To enter upon the Permittee's premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
- B. To have access to, and copy at reasonable cost and at reasonable times, any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

G6. DUTY TO MITIGATE

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

G7. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G8. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any other applicable federal, state, or local statutes, ordinances, or regulations.

G9. MONITORING

A. Representative Sampling:

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge, including

Tracked Changes and Notes on Main Text of the Permit

representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

B. Records Retention:

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least ~~five~~ ten years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology. On request, monitoring data and analysis shall be provided to Ecology.

[NOTE TO ECOLOGY: Based on Seattle's experience with monitoring reports, we recommend that the retention period be raised from five to ten years.]

C. Recording of Results:

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Test Procedures:

All sampling and analytical methods used to meet the monitoring requirements specified in the ~~approved~~ stormwater management program shall conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by Ecology.

E. Flow Measurement:

Where flow measurements are required by other conditions of this Permit, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years.

F. Lab Accreditation:

Where data collection is required by other conditions of this Permit, all monitoring data, except for flow, temperature, conductivity, pH, total residual chlorine, and other

Tracked Changes and Notes on Main Text of the Permit

exceptions approved by Ecology, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by Ecology.

G. Additional Monitoring:

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G10. REMOVED SUBSTANCES

With the exception of decant from street waste vehicles, the Permittee shall not allow collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to be resuspended or reintroduced to the storm sewer system or to waters of the state. ~~Decant from street waste vehicles resulting from cleaning stormwater facilities may be reintroduced only when other practical means are not available and only in accordance with the Street Waste Disposal Guidelines in Appendix 6.~~

[NOTE TO ECOLOGY: See comments to Appendix 6, in a separate Seattle Attachment, regarding the overreaching nature of this requirement. An alternative would be for the permit to offer Appendix 6 as non-mandatory guidance, for informational purposes only.]

G11. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G12. REVOCATION OF COVERAGE

The director may terminate coverage under this General Permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC. Cases where coverage may be terminated include, but are not limited to the following:

- A. Violation of any term or condition of this general permit;
- B. Obtaining coverage under this general permit by misrepresentation or failure to disclose fully all relevant facts;
- C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

Tracked Changes and Notes on Main Text of the Permit

- D. A determination that the permitted activity endangers human health or the environment, or contributes significantly to water quality standards violations;
 - E. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090;
 - F. Nonpayment of permit fees assessed pursuant to RCW 90.48.465;
- Revocation of coverage under this general permit may be initiated by Ecology or requested by any interested person.

G13. TRANSFER OF COVERAGE

The director may require any discharger authorized by this general permit to apply for and obtain an individual permit in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

G14. GENERAL PERMIT MODIFICATION AND REVOCATION

This general permit may be modified, revoked and reissued, or terminated in accordance with the provisions of WAC 173-226-230. Grounds for modification, revocation and reissuance, or termination include, but are not limited to the following:

- A. A change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this general permit;
- B. Effluent limitation guidelines or standards are promulgated pursuant to the CWA or chapter 90.48RCW, for the category of dischargers covered under this general permit;
- C. A water quality management plan containing requirements applicable to the category of dischargers covered under this general permit is approved; or
- D. Information is obtained which indicates that cumulative effects on the environment from dischargers covered under this general permit are unacceptable.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G15. REPORTING A CAUSE FOR MODIFICATION OR REVOCATION

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G12 REVOCATION OF COVERAGE, G14 GENERAL PERMIT MODIFICATION AND REVOCATION, or 40 CFR 122.62 must report such plans, or such information, to Ecology so that a decision can be made on whether action to modify, or revoke and reissue this permit will be required. All such reports shall be made in the annual report, unless otherwise directed by Ecology. Ecology may then require submission

Tracked Changes and Notes on Main Text of the Permit

of a new or amended application. Submission of such application does not relieve the Permittee of the duty to comply with this permit until it is modified or reissued.

G16. APPEALS

- A. The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal within thirty days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B. The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to ecology for consideration of issuance of an individual permit or permits.
- D. Modifications of this permit are appealable in accordance with Chapter 43.21B RCW and Chapter 173-226 WAC.

G17. PENALTIES

40 CFR 122.41(a)(2) and (3), 40 CFR 122.41(j)(5), and 40 CFR 122.41(k)(2) are hereby incorporated into this permit by reference.

G18. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. An expired permit continues in force and effect until a new permit is issued or until Ecology cancels the permit. Only Permittees who have reapplied for coverage under this permit are covered under the continued permit.

G19. CERTIFICATION AND SIGNATURE

- All applications, reports, or information submitted to Ecology shall be signed and certified.
- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 - B. All reports required by this permit and other information requested by Ecology shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

Tracked Changes and Notes on Main Text of the Permit

1 1. The authorization is made in writing by a person described above and submitted to
2 Ecology, and

3 2. The authorization specifies either an individual or a position having responsibility
4 for the overall development and implementation of the stormwater management
5 program. (A duly authorized representative may thus be either a named individual
6 or any individual occupying a named position.)

7 C. Changes to authorization. If an authorization under General Condition G19.B.2 is no
8 longer accurate because a different individual or position has responsibility for the
9 overall development and implementation of the stormwater management program, a
10 new authorization satisfying the requirements of General Condition G19.B.2 must be
11 submitted to Ecology prior to or together with any reports, information, or applications
12 to be signed by an authorized representative.

13 D. Certification. Any person signing a document under this permit shall make the
14 following certification:

15 "I certify under penalty of law, that this document and all attachments were prepared
16 under my direction or supervision in accordance with a system designed to assure that
17 qualified personnel properly gathered and evaluated the information submitted. Based
18 on my inquiry of the person or persons who manage the system or those persons
19 directly responsible for gathering information, the information submitted is, to the best
20 of my knowledge and belief, true, accurate, and complete. I am aware that there are
21 significant penalties for submitting false information, including the possibility of fine
22 and imprisonment for willful violations."

23 G20. RECORDS RETENTION

24 Each Permittee is required to keep all records related to this Permit for at least five years.

26 ~~G21. NON-COMPLIANCE NOTIFICATION~~

27 ~~In the event the Permittee is unable to comply with any of the terms and conditions of this~~
28 ~~permit, including discharges from the Permittees MS4 which may cause a threat to human~~
29 ~~health or the environment, the Permittee shall:~~

30 ~~A. Take appropriate action to correct or minimize the threat to human health or the~~
31 ~~environment or otherwise stop or correct the condition of noncompliance.~~

32 ~~B. Notify Ecology of the failure to comply with the permit terms and conditions within 30~~
33 ~~days of becoming aware of the non-compliance.~~

Tracked Changes and Notes on Main Text of the Permit

~~C. Notify Ecology immediately in cases where the Permittee becomes aware of a discharge from the Permittees MS4 which may cause or contribute to an eminent threat to human health or the environment.~~

[NOTE TO ECOLOGY: The section is new in this draft; it is inappropriate to a municipal stormwater permit, was not needed during the previous permit term, and should be entirely deleted. In the context of a detailed programmatic permit, reporting “inability to comply” with any term becomes overly burdensome and punitive. Discharges of which permittee becomes aware that threaten health are very likely to be reported to local health authorities under existing laws. G3 and G15 (both with Seattle revisions) are sufficient. As an alternative, consider the following:

“In the event the Permittee becomes aware that a discharge has occurred from Permittee’s MS3 which may cause an imminent threat to human health or the environment, the Permittee shall take appropriate action to stop or correct the condition.”]

G.21 UPSET

“Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; and 3) the Permittee submitted notice of the upset within five days.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

[NOTE TO ECOLOGY: Permittees are entitled to an upset defense, described in federal law and important this permit term considering the increasing role of complex, technology-based BMPs.]

Tracked Changes and Notes on Main Text of the Permit

1 DEFINITIONS AND ACRONYMS

2 “AKART” means All Known, Available, and Reasonable methods of prevention, control and Treatment.

3 “All known, available and reasonable methods of prevention, control and treatment” refers to the
4 State Water Pollution Control Act, Chapter 90.48.010 and 90.48.520 RCW.

5 ~~“Applicable TMDL” means a TMDL which has been approved by EPA on or before the issuance~~
6 ~~date of this Permit, or prior to the date that the Permittee’s application is received by Ecology, or~~
7 ~~prior to a modification of this Permit, whichever is later.~~

8 **[NOTE TO ECOLOGY: This new definition does not match Ecology’s public review draft**
9 **of S7.]**

10 “Best Management Practices (BMPs)” means the schedules of activities, prohibitions of
11 practices, maintenance procedures, and structural and/or managerial practices that when used
12 singly or in combination, prevent or reduce the release of pollutants and other adverse impacts to
13 waters of Washington State.

14 “Bypass” means the diversion of stormwater from any portion of a stormwater treatment facility.

15 “CWA” means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act
16 or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub.
17 L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

18 “Component” or “Program Component” means the elements of the stormwater management
19 program listed in Special Condition S5Stormwater Management Program for Permittees or S6
20 Stormwater Management Program for Co-Permittees and Secondary Permittees.

21 ~~“Co-Permittee” means an owner or operator of a municipal separate storm sewer permittee to an~~
22 ~~NPDES permit that has co-applied for permit coverage with another permittee, and that is only~~
23 ~~responsible has responsibility for limited permit conditions relating to the discharge for which it~~
24 ~~is operator. See also 40 CFR 122.26(b)(1).~~

25 **[NOTE TO ECOLOGY: Better matches current permit and 40 CFR 122.26(b)(1).**
26 **Throughout the definitions, Seattle suggests deleting “see also” references, which make the**
27 **definitions more difficult to interpret.]**

28 “Discharge” for the purpose of this permit, unless indicated otherwise, refers to discharges from
29 Municipal Separate Storm Sewers of the Permittees. ~~See also 40 CFR 122.2.~~

30 “Entity” means another governmental body, or public or private organization, such as but not
31 limited to another permittee, a conservation district, or volunteer organization.

Tracked Changes and Notes on Main Text of the Permit

1 "40 CFR" means Title 40 of the Code of Federal Regulations, which is the codification of the
2 general and permanent rules published in the Federal Register by the executive departments and
3 agencies of the federal government.

4 "General Permit" means a permit which covers multiple dischargers of a point source category
5 within a designated geographical area, in lieu of individual permits being issued to each
6 discharger.

7 "Heavy equipment maintenance or storage yard" means an uncovered area where any heavy
8 equipment, ~~such as~~which means mowing equipment, excavators, dump trucks, backhoes, or
9 bulldozers ~~are~~is washed or regularly maintained at an established heavy equipment washing
10 facility, or where at least five pieces of heavy equipment are stored on a permanent basis.

11 "Illicit connection" means any man-made conveyance that is connected to a municipal separate
12 storm sewer in a manner deemed unauthorized by the Permittee, such as without a permit or
13 other legal justification, excluding roof drains, foundation and footing drains and other similar
14 type connections designed to convey drainage, surface water and ground water. Examples of
15 illicit connections include sanitary sewer connections, floor drains, channels, pipelines, conduits,
16 inlets, or outlets that are connected directly to the municipal separate storm sewer system.

17 "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed
18 entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES
19 permit for discharges from the municipal separate storm sewer) and discharges resulting from
20 fire fighting activities, except that discharges in the categories listed in {Special Condition
21 2/S5.C.8.b.ii} are not illicit discharges unless so determined by Permittee according to the terms
22 of this permit.

23 **[NOTE TO ECOLOGY: Important addition made because these non-stormwater**
24 **discharges are not illicit, under the terms of S5.C.8.]**

25 "Integrated Pest Management (IPM)" means a coordinated decision-making and action process
26 that uses the most appropriate pest control methods and strategy in an environmentally and
27 economically sound manner to meet agency programmatic pest management objectives. The
28 elements of integrated pest management ~~include~~are contained in RCW 17.15.010.

29 (a) ~~Preventing pest problems;~~

30 (b) ~~Monitoring for the presence of pests and pest damage;~~

31 (c) ~~Establishing the density of the pest population, that may be set at zero, that can be tolerated or~~
32 ~~correlated with a damage level sufficient to warrant treatment of the problem based on health,~~
33 ~~public safety, economic, or aesthetic thresholds;~~

34 (d) ~~Treating pest problems to reduce populations below those levels established by damage~~
35 ~~thresholds using strategies that may include biological, cultural, mechanical, and chemical~~

Tracked Changes and Notes on Main Text of the Permit

control methods and that must consider human health, ecological impact, feasibility, and cost-effectiveness; and

(e) Evaluating the effects and efficacy of pest treatments.

[NOTE TO ECOLOGY: The definition does not need this level of detail and can be shortened to refer readers to RCW 17.15.010.]

“Pest” means, but is not limited to, any insect, rodent, nematode, snail, slug, weed, and any form of plant or animal life or virus, except virus, bacteria, or other microorganisms on or in a living person or other animal or in or on processed food or beverages or pharmaceuticals, which is normally considered to be a pest, or which the director of the department of agriculture may declare to be a pest.

"Large Municipal Separate Storm Sewer System (Large MS4)" means all Municipal Separate Storm Sewers that are either (1) located in an incorporated place with a population of 250,000 or more according to the 1990 decennial census by the Bureau of Census, or (2) located in a County with unincorporated urbanized areas with a population of 250,000 or more, according to the 1990 decennial census by the Bureau of Census identified in the App. H to 40 CFR Part 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties. See also 40 CFR 122.26(b)(4).

[NOTE TO ECOLOGY: Revision drawn from 40 CFR 122.26(b)(4).]

“Low Impact Development” (LID) means a stormwater management and land development strategy applied at the parcel and subdivision scale that emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic pre-development hydrologic functions.

"Major Municipal Separate Storm Sewer Outfall" means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more, or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 12 acres or more). See also 40 CFR 122.26(b)(5).

“Maximum Extent Practicable (MEP)” refers generally to paragraph 402(p)(3)(B)(iii) of the federal Clean Water Act which reads as follows: Permits for discharges from municipal storm sewers “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system, design, and engineering methods, and other such provisions as the Administrator or the State determines appropriate for the control of such pollutants.”

Tracked Changes and Notes on Main Text of the Permit

1 “Material Storage Facilities” means an uncovered area used on a permanent basis for outside
2 storage of uncontained bulk materials (liquid, solid, granular, etc.) in piles, barrels, tanks, bins,
3 crates, or other means.

4 “Medium Municipal Separate Storm Sewer System (Medium MS4)” means all Municipal
5 Separate Storm Sewers (MS3s) that are either (1) located in an incorporated place with a
6 population of more than 100,000 but less than 250,000 according to the 1990 decennial census
7 by the Bureau of Census, or (2) located in a county with unincorporated urbanized areas of more
8 than 100,000 but less than 250,000 according to the 1990 decennial census by the Bureau of
9 Census listed in App. I to 40 CFR Part 122, except municipal separate storm sewers that are
10 located in the incorporated places, townships or towns within such county. See also 40 CFR
11 122.26(b)(7).

12 **[NOTE TO ECOLOGY: Revision drawn from 40 CFR 122.26(b)(7).]**

13 “Municipal Separate Storm Sewer (MS3)” means a conveyance, or system of conveyances
14 (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches,
15 manmade channels, or storm drains):

16 (a) owned or operated by a state, city, town, borough, county, parish, district, association,
17 or other public body (created by or pursuant to State Law) having jurisdiction over
18 disposal of sewage, industrial wastes, storm water, or other wastes, including special
19 districts under State Law such as a sewer district, flood control district or drainage
20 district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or
21 a designated and approved management agency under section 208 of the CWA that
22 discharges to waters of the United States;

23 (b) designed or used for collecting or conveying stormwater;

24 (c) which is not a combined sewer; and

25 (d) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40
26 CFR 122.2.

27 **[NOTE TO ECOLOGY: Revision drawn from 40 CFR 122.26(b)(8).]**

28 “Municipal separate storm sewer system (MS4)” means all separate storm sewers that are
29 defined as “large” or “medium” or “small” municipal separate storm sewer systems. ~~See also 40~~
30 ~~CFR 122.26(b)(18)~~

31 “National Pollutant Discharge Elimination System” (NPDES) means the national program for
32 issuing, modifying, revoking, and reissuing, terminating, monitoring and enforcing permits, and
33 imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the
34 Federal Clean Water Act, for the discharge of pollutants to surface waters of the state from point
35 sources. These permits are referred to as NPDES permits and, in Washington State, are
36 administered by the Washington Department of Ecology.

Tracked Changes and Notes on Main Text of the Permit

1 "Notice of Intent" (NOI) means the application for, or a request for coverage under this General
2 Permit pursuant to WAC 173-226-200. See Appendix 5 for the NOI for this permit.

3 "Notice of Intent for Construction Activity," and "Notice of Intent for Industrial Activity" mean
4 the application forms for coverage under the Construction Stormwater General Permit and the
5 Industrial Stormwater General Permit.

6 "Outfall" means point source as defined by 40 CFR 122.2 at the point where a municipal
7 separate storm sewer discharges to waters of the State and does not include open conveyances
8 connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances which
9 connect segments of the same stream or other waters of the State and are used to convey waters
10 of the State.

11 "Physically Interconnected" means that one MS3 is directly connected to a second MS3 in such a
12 way that it allows for direct discharges to the second system, without intervening ownership or
13 operation. For example, the roads with drainage systems and municipal streets of one entity
14 MS3 permittee are physically connected directly to a MS3 belonging to another entity permittee.

15 **[NOTE TO ECOLOGY: Connection should be specified as direct, without intervening**
16 **ownership or operation. "Entity" has been redefined, so other terms must be used.]**

17 "Process Wastewater" means any water which, during manufacture or processing, comes into
18 direct contact with or results ~~form~~from the production or use of any raw material, intermediate
19 product, finished product, by product, or waste product.

20 "Qualified Personnel" means someone who has had ~~professional~~ training in the aspects of
21 stormwater management they are ~~responsible for~~assigned.

22 **[NOTE TO ECOLOGY: There is no definition of "professional," so the permit should use**
23 **a performance standard for training.]**

24 "RCW" means the Revised Code of Washington State.

25 "Runoff" see Stormwater.

26 "Secondary Permittee" is an operator of municipal separate storm sewer which is not a city, town
27 or county. Secondary Permittees include special purpose districts and other public entities
28 identified in S1D which operate municipal separate storm sewers.

29 **[NOTE TO ECOLOGY: This new definition confirms that Phase I cities and counties are**
30 **never secondary permittees under this permit, even for a Phase I city's or county's MS3**
31 **that is located in the jurisdiction of another Phase I city or county. Seattle agrees and**
32 **suggests that the Phase I permit coverage should suffice for all such MS3s without further**
33 **application or different programming. This issue needs coordination in S6 as well.]**

Tracked Changes and Notes on Main Text of the Permit

1 "Shared Waterbodies" means waterbodies, including downstream segments, lakes and estuaries,
2 that receive discharges from more than one Permittee.

3 "Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

4 "Stormwater Associated with Industrial and Construction Activity" means the discharge from
5 any conveyance which is used for collecting and conveying stormwater, which is directly related
6 to manufacturing, processing or raw materials storage areas at an industrial plant, or associated
7 with clearing grading and/or excavation, and is required to have an NPDES permit in accordance
8 with 40 CFR 122.26.

9 "Stormwater facilities regulated by the Permittee" means all ~~known~~, permanent stormwater
10 treatment and flow control BMPs not owned by the Permittee, known to Permittee, located in the
11 geographical area of the Phase I city's or county's MS4, that discharge into municipal separate
12 storm sewers owned or operated by the Permittee, and over which the Permittee has actual
13 regulatory authority.

14 **[NOTE TO ECOLOGY: This new definition is too broad, and needs to be limited to**
15 **identify facilities actually regulated. There may be state or federal law limitations on local**
16 **authority to regulate facilities.]**

17 "Stormwater Management Manual for Western Washington" means the 5-volume technical
18 manual (Publication Nos. 05-10-029 through 05-10-033) published by Ecology in February
19 2005.

20 "Stormwater Management Program (SWMP)" generally means a set of actions and activities
21 designed to reduce the discharge of pollutants from the regulated ~~small~~ MS4 and to protect water
22 quality to the maximum extent practicable-and to protect water quality, and comprising the
23 components listed in S5 or S6 of this Permit and any additional actions required by S7 ~~necessary~~
24 ~~to meet the requirements of~~ regarding applicable TMDLs.

25 **[NOTE TO ECOLOGY: SWMP is adequately discussed in the permit, and without**
26 **revision, this definition could be read to unnecessarily place additional or other**
27 **requirements on Permittees, beyond the permit terms.]**

28 "Urban/higher density rural sub-basins" means any sub-basin or portion thereof that is within or
29 proposed to be within the urban growth area (UGA), or any rural area sub-basin or portion
30 thereof, fifty percent or more of which is comprised of lots smaller than 5 acres in size.

31 "Waters of the State" includes those waters as defined as "waters of the United States" in 40
32 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the
33 state" as defined in Chapter 90.48 RCW which includes lakes, rivers, ponds, streams, inland
34 waters, underground waters, salt waters and all other surface waters and water courses within the
35 jurisdiction of the State of Washington.

Tracked Changes and Notes on Main Text of the Permit

- 1 “Water Quality Standards” means Surface Water Quality Standards, Chapter 173-201A WAC,
- 2 Ground Water Quality Standards, Chapter 173-200 WAC, and Sediment Management Standards,
- 3 Chapter 173-204 WAC.

